



Bolivia Trade and Business Competitiveness project for the GBTI (General Business, Trade, and Investment) IQC

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International Hydrocarbons Fiscal Systems Benchmarking Review

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**INTERNATIONAL HYDROCARBONS
FISCAL SYSTEMS BENCHMARKING
REVIEW**

TARGET CONSULTING GROUP

2004

Disclaimer and Limitations

This report has been prepared to the best of our knowledge and with every effort made to ensure its accuracy.

We have combined experience, published data and other information that could reasonably have been expected to be sourced within the timescale provided to verify the content of the report. Any confidential information has been omitted.

The most recent fiscal systems analysed date back to the year 2000, as more recent information is not generally available.

Some fiscal systems have distinct policy clauses for oil and gas taxation. Where figures vary between the two, the figures relevant to gas are used within this report. Where no such distinction is made, single figures provided are included, but it is accepted that these may be designed for oil taxation policy.

Whilst every effort that has been made to assure the accuracy and validity of this document, Target Consulting Group cannot be held responsible for the consequences of any omissions or errors.

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1.

Scope

- 1.1 The objective of this report is a benchmark study that will provide an understanding of the various hydrocarbon fiscal regimes around the world that can provide a benchmark for comparison with Bolivian fiscal terms. Specific evaluation will be made of gas regimes and emphasis will also be given to gaining an understanding of the treatment of gas fields where windfall profits may be made.
- 1.2 The specific objectives of the project can be summarized as follows:
- Identify the total level of Government take for petroleum exploration and development contracts in countries outside Bolivia.
 - Specifically identify the levels of Government take in gas producing countries and summarize the methods in which that Government revenue is derived.
 - Compare levels of Government take from natural gas revenues for other countries with the total take in Bolivia.
 - The comparative results will be designed to allow justifiable, realistic, fair and appropriate targets to be established for revising the Bolivian fiscal regime relating to natural gas.
 - Identify regimes that include specific or modified terms for large fields and evaluate them as a model for the large Bolivian gas fields.
 - The results of this evaluation will provide clear expectations for the Bolivian Government and other interested institutions and will form a basis for communication of expectations with all parties.
- 1.3 The overall study will cover the following countries, with those in bold categorised as "Group 1 countries" (G1) and afforded greater attention. Those countries highlighted with an asterisk (*) are in direct competition with Bolivia for international Liquid Natural Gas markets.

Abu Dhabi	Holland	Pakistan
Algeria Offshore	India offshore	Peru*
Algeria onshore	Indonesia*	Qatar
Angola	Iran	Romania
Argentina*	Iraq	Russia PSC*
Australia*	Ireland	Russia royalty and tax*
Azerbaijan	Kazakhstan	South Africa
Bangladesh	Libya onshore	Syria
Brazil*	Malaysia	Thailand
Brunei	Mozambique	Trinidad & Tobago*
Canada	Myanmar	Turkey
China	Netherlands	Turkmenistan
Colombia	Nigeria	UK
Denmark	Nigeria shelf	USA & Alaska*
Egypt Nile Delta	Norway	Venezuela
Egypt Western Desert	Oman	Vietnam
Georgia		Yemen

Note: no information was available for Germany, which has very limited domestic fossil fuel resources and relies heavily on imports to satisfy its own demands.

2. Executive Summary

2.1 Competitors and Neighbours Examined

2.1.1 In addition to Bolivia itself, all of the jurisdictions listed in section 1.3 are analysed in this report.

2.1.2 The Group 1 countries (G1) given specific analytical attention in this report are:

Argentina	Australia
Brazil	Colombia
Indonesia	Peru
Russia	Trinidad & Tobago
USA/USA Alaska	Venezuela

2.2 Reliability of Take Statistics

2.2.1 Within the 50 jurisdictions 185 regimes were analysed of which 44 were royalty/tax systems ("RT"), 129 production sharing contracts ("PSC") and 12 risk service agreements ("RSA"). The regimes have been examined using the most recent data readily available.

2.2.2 Within the 12 G1 jurisdictions, there were 42 regimes of which 16 were royalty/tax systems ("RT"), 16 production sharing contracts ("PSC") and 10 risk service agreements ("RSA"). The regimes have been examined using the most recent data readily available.

2.2.3 An assumption made when analysing this data is that the actual take received by governments equates to that intended by the legislation. It is imperative that any fiscal policy is supported by administrative systems that can ensure effective application of the law. The quality and efficiency of the systems in place in the sample group is unknown.

2.3 Overall Level of Bolivian Government Take in Bottom Half of Sample

2.3.1 Of the 185 fiscal systems analysed, government tax take ranges from 25% in Ireland to over 96% in Algeria, with an average national rate of 73%. Bolivian government take¹ ranks seventh from bottom of the whole group at an average 61%. Furthermore contracts entered into since 1990 all feature government take below that level.

2.3.2 Comparing G1 fiscal systems in isolation, it appears there may be scope to increase Bolivia's overall government take whilst remaining competitive within the LNG market. Of the 42 fiscal systems analysed, government tax take ranges from just under 50% in Argentina to over 90% in Venezuela, with an average national rate of 66%. Bolivian government take ranks fifth from bottom of the G1 sample group.

¹ For definition and calculation methodology for "government take" see section 3.

- 2.3.3 G1 country averages appear well below those across all countries analysed, indicating that core tax rates in LNG production may be lower than in other contracts that have been specifically drafted for oil.

2.4 A Low Yield System in Use

- 2.4.1 Despite being named “Shared Risk Contracts” Bolivian agreements pass title of resources to the contractor at the wellhead and are in substance royalty/tax systems. Of the three types of fiscal system examined, royalty/tax provides the lowest average government take (66.5%) and 15 of the 20 lowest systems in terms of tax take are royalty/tax systems.
- 2.4.2 In the G1 jurisdictions alone the average government take for royalty tax systems is 62%, with 7 of the 11 lowest systems being royalty/tax systems.
- 2.4.3 Royalty/tax systems tend to be regressive due to the relative importance of the royalty element. Regressive systems arguably discourage investment, particularly in marginal fields, and do not provide a mechanism to enable governments to benefit from “windfall” profits associated with larger fields. The Bolivian approach exacerbates this situation with royalties representing on average over 50% of government tax take compared to an average of 38% across the remainder of royalty / tax systems (40% amongst G1’s systems).

2.5 Political and Legal Implications of Royalty/Tax Systems

- 2.5.1 As indicated in 2.4 above the Bolivian system is of a type that will typically pass legal title to the contractor at the wellhead. In Bolivia as in many countries the public perception of this can be negative. From a legal perspective royalty/tax systems pass title to the resource at an early stage, making legal action less secure for the contracting country in the event of any dispute. This problem is avoided in PSC’s and RSA’s, which also allow greater government involvement in the entire production process.

2.6 Bolivian Income Tax Rates in Lower Range of Sample

- 2.6.1 At 25% in more recent systems, and with an overall average of 30%, Bolivia’s income tax rates are well below the flat rate averages of 43% across all countries and 38% for the remainder of the G1 sample group. Relatively low income tax rates and the absence of individual license ring-fencing may contribute to Bolivia’s income tax yield appearing poor in comparison to other countries.

2.7 Trend Towards Flexible Rates Not Yet Adopted

- 2.7.1 The use of sliding scale methods of calculation, based on production levels or predicted profitability (“R” factors, Rate of Return contracts or Investment Multiples) generally coincides with a higher level of tax take than for fixed rates within the examined jurisdictions. Bolivia does not adopt a sliding scale in the calculation of any of its tax rates.

- 2.7.2 Over two thirds of other countries have systems that align rates of taxation with profitability. Within the G1 sample group sliding scales have been applied in the calculation of Profit Resource Split in PSCs, Profit Share in RSA, surtax, royalties. Outside of the G1 sample group, sliding scales are also adopted in the calculation of income tax and cost recovery limits.

2.8 Surtax Rates Average But Fixed

- 2.8.1 The surtax system adopted in the Bolivian 1997 Risk Service Contracts is a flat rate policy and the rate used is low in comparison with the maximum rate of competitors. Bolivia's 25% rate is average for small or medium sized fields, but with no scope for profitability-correlation, it is below the average maximum rate of 31%. These averages remain constant amongst the G1 systems alone.
- 2.8.2 Surtaxes using sliding-scale rates to capture windfall profits may be more effective and are generally perceived as more acceptable by contractors. For larger fields, the use of sliding-scale methods of calculation, based on production levels or predicted profitability ("R" factors or Rate of Return contracts), generally result in a higher level of surtax than flat rates.

2.9 The More Taxes the Higher the Tax Take

- 2.9.1 Within the G1 sample group there appears to be a positive-correlation between the number of core taxes within a system and the tax take. Higher tax take levels typically come from a spread of taxes, rather than a reliance on one or two. The top seven systems in terms of tax take all include at least three of the four core taxes. In contrast, the bottom five systems all derive income from one or two core taxes.
- 2.9.2 This trend is less marked across all contracts, but twelve of the twenty top systems in take terms derive revenue from three or four core taxes and 13 of the bottom twenty systems use just one or two.

2.10 Geographical Location a Factor in Take Levels

- 2.10.1 A trend is also identified between overall tax take from core taxes and proximity to target markets. Using South America as an example, in terms of proximity to the US, the countries analysed rank in the same order as they do for government take: Venezuela (90%), Colombia (78%), Peru (69%), Brazil (68%), Bolivia (61%), Argentina (50%).

3.

Government Take Methodology

3.1 Introduction

- 3.1.1 The starting point in any comparative or analysis of the world's fiscal systems is to acknowledge that each country's system is unique. This diversity is even more evident in the field of natural resources, which attract special attention due to their importance within individual nations' economies.
- 3.1.2 The focus of comparisons within this report is "take" (a percentage of incomes after deduction for cost recovery – i.e. economic profit) rather than total revenues. The government's share of this profit is known as "Government Take".

3.2 The Makeup of Government Take

- 3.2.1 There are a variety of taxes that form a government's overall revenue within each individual fiscal system. Certain taxes, or variations thereof, exist across a number of world's systems, whilst others are jurisdiction specific. This variety makes an exact comparison of each system impossible and as a result it is essential to first identify those common methods of taxation that are both comparable and quantifiable ("core taxes").
- 3.2.2 The government take figures within this report relate to government share of economic profit from these core taxes. Within each fiscal system terminology varies and at times can be misleading. Therefore, in establishing core taxes it is the essential characteristics of the individual taxes that has determined their inclusion within the take calculations, rather than the names of the taxes themselves.
- 3.2.3 Furthermore, many fiscal systems apply a number of differently named taxes at the same stage in the fiscal system. Typically, these may be federal and local variations of a main tax or royalty, or "add-ons" such as Labour Participation, Spill Contingency or Environmental Taxes. These have all included within the "take" calculations as "core tax" elements.

3.3 Core Taxes - Assumptions

- 3.3.1 For the purposes of this comparison four "core taxes" have been identified. In determining a method for comparison certain assumptions have been made.

3.4 Gross Revenues

- 3.4.1 In order to provide comparisons between levels of government take across all systems, a fixed level of gross proceeds has been assumed.
- 3.4.2 It is acknowledged that actual proceeds received on resource sale may differ from the deemed values included within contracts on which core taxes will be applied. This is particularly true for royalties, where the tax is imposed before the level of actual proceeds is known. Any difference in these values is not factored into these take calculations.

3.5 Cost Recovery

- 3.5.1 In calculating government take, contractors' cost recovery under PSCs and RSAs is assumed to be 35% of gross revenues. This is designed to reflect industry averages, whilst permitting a comparison of core tax levels.
- 3.5.2 Fiscal Systems that impose limits commonly restrict cost recoveries to a percentage of gross revenues (often between 40% and 60% of gross revenues, with an average of 52%). Larger gas and oil fields are characterised by lower costs as a percentage of gross revenues and in the largest fields recovered costs can be as low as 15% of total revenues.
- 3.5.3 Outside of the G1 sample group, some PSCs (e.g. Malaysia, Syria and Bangladesh) use sliding scale cost recovery systems with are negatively correlated to production levels. This perhaps better reflects the true cost levels as a function of gross revenues.
- 3.5.4 In other PSCs (e.g. Algeria and Libya) no separate cost recovery is available to the contractor. Instead, the profit/resource split calculation factors in the cost recovery element. A sliding scale can again be implemented in this way.

3.6 System Weighting

- 3.6.1 In calculating average tax take statistics, all contracts within this report are given the same level of weighting. This is particularly important where national averages are concerned, with no consideration being given to the breadth of application of each fiscal system.

3.7 Royalties

- 3.7.1 Royalties may be levied at federal, regional and local levels and royalties of all types are included within the "take" calculations. Although royalties are almost always taken as a percentage of gross revenues certain regimes (e.g. Argentina) provide that regional and local royalties are calculated on gross revenues net of federal royalties paid.
- 3.7.2 The rate at which royalties are levied not only differs between jurisdictions but is also dependent upon the nature of the resource being extracted. There are frequently differences between the level of onshore and offshore royalties charged (the offshore royalty typically being lower). The onshore figure is used in these comparisons.
- 3.7.3 Similarly, levels of royalty for oil and gas contracts under the same fiscal system may also vary. In general the level of royalty is lower for gas, and this is the figure is used in the comparisons. Where a single rate applies that figure is used, although it is accepted that this may have been designed for oil rather than gas production.
- 3.7.4 Where royalties are calculated on a sliding scale a position three quarters of the way up the scale has been taken to reflect likely results in a larger field. The scale ranges are shown where known in Appendix 3 of the report.

3.8 Corporate Income Tax

- 3.8.1 Corporate Income tax is generally raised on contractor's share of net revenues i.e. gross revenues less contractor's allocated costs. As a consequence the level of costs that are allowable by a contractor in any jurisdiction becomes an important factor in assessing the tax regime and this is examined in detail in section 5.
- 3.8.2 The 35% of gross revenues figure assumed for cost recovery (as per 3.5) is also used as the allowable deduction level for income tax purposes across all systems.
- 3.8.3 Throughout the comparisons income tax is taken to encompass other taxes that are charged at the same point and calculated on a similar basis as income tax itself. These are essentially an extension of the country's income tax policy and examples include Labour Participation Tax, Business Equity Tax, Contingency Tax and Unemployment Levy.

3.9 Surtax

- 3.9.1 Surtax is typically collected at the same point as income tax and as such is often seen as a further form of corporate income tax. However, in this report it is specifically identified.
- 3.9.2 Under some fiscal systems surtax is levied on the same profit level as income tax, whilst others allow a deduction for income tax before assessing surtax on remaining profits.
- 3.9.3 Where surtax is calculated on a sliding scale, a position three quarters of the way up the profitability/production level scale has been taken to reflect likely results in a larger field. The scale ranges are shown, where known, in Appendix 3 of the report, with further analysis of the scales used in the surtax section of the report (Section 6).

3.10 Profit Split, Resource Split and Government Participation

- 3.10.1 The non – tax element of government take arises from profit split under RSAs and extracted hydrocarbons under PSCs. These are typically taken after cost recoveries, but before assessment to income tax and/or surtax. The contractor's share of the profit or resource is then typically assessable to income and surtaxes.
- 3.10.2 Production sharing and profit resource splitting are considered as one for the purposes of the comparisons. This is because, although government participation typically involves the repayment of past costs, costs do not feature as part of the take calculation.
- 3.10.3 As with the other core taxes, profit and resource splits can be a flat rate or based on a sliding scale. Where a sliding scale is used, a position three quarters of the way up the scale has been taken to reflect likely results in a larger field. The scale ranges are shown, where known, in Appendix 3 of the report.
- 3.10.4 Price cap formulas (which provide for a higher government share above a certain resource price level) are not factored into this report, but where these are known to exist they are highlighted in Appendices 3 and 4.
- 3.10.5 Levels of resource share for oil and gas contracts under the same fiscal system may also vary. Where a single rate applies that figure is used, although it is accepted that this may have been designed for oil rather than gas production.

3.11 Fiscal System Types

- 3.11.1 For an overview of how these individual core taxes fit into the three main fiscal system types (PSC, RSA and R/T) see Appendix 1.

4. Government Take

4.1 Government Take by Country

- 4.1.1 Figure 4.1 shows an average of government take by nation. Bolivia's average take from its three fiscal systems analysed is 61%, compared with a national average for all other systems of 73%. The average amongst other G1 countries is 66%.
- 4.1.2 Of the G1 systems analysed, national averages range from 50% Argentina to over 90% in Venezuela. Overall the range is expanded, from 25% in Ireland to 96% in Iran.

4.2 Government Take in Royalty Tax Systems

- 4.2.1 Figure 4.2 shows a comparison of government take amongst royalty/tax systems in G1 jurisdictions. Similar comparisons of the wider royalty/tax systems are found in Appendix 4 of this report.
- 4.2.2 The average tax take amongst the 16 G1 royalty/tax systems analysed is 62%, compared with 64% in PSCs and 78% in RSAs. Seven of the eleven lowest G1 systems in terms of overall tax take are royalty/tax systems. Bolivia's own national average take of 61% is only slightly below the G1 royalty/tax system average.
- 4.2.3 Across all 44 royalty/tax systems analysed the average tax take is 67%, compared with 80% in PSCs and 81% in RSAs. Thirteen of the twenty lowest systems in terms of overall tax take are royalty/tax systems.

4.3 Government Take in PSCs

- 4.3.1 Figure 4.3 shows a comparison of government take amongst PSCs in G1 jurisdictions. Similar comparisons of the wider PSC systems are found in Appendix 4 of this report.
- 4.3.2 Of the 16 G1 PSCs analysed in the G1 sample, the level of government take ranges from 50% to 83%, with an average of 61%. The lowest four PSCs in terms of tax take only derive core tax revenue through profit resource sharing.
- 4.3.3 Of all 129 PSCs analysed, the level of government take ranges from 50% to 96%. The average government take across all PSCs is 80%.

4.4 Government Take in RSAs

- 4.4.1 Figure 4.4 shows a comparison of government take amongst RSAs in G1 jurisdictions. Similar comparisons of the wider RSA systems are found in Appendix 4 of this report.

- 4.4.2 There are 10 RSAs analysed in the G1 sample, which have rates of tax take ranging from 69% to 90%. The average government take rate from RSAs of 78% is far greater than the other two system types.
- 4.4.2.1 There are 12 RSAs analysed in total, which have rates of tax take ranging from 69% to 96%. The average government take rate from RSAs of 81% is far more in line with the PSC average than found in the G1 sample group comparison.

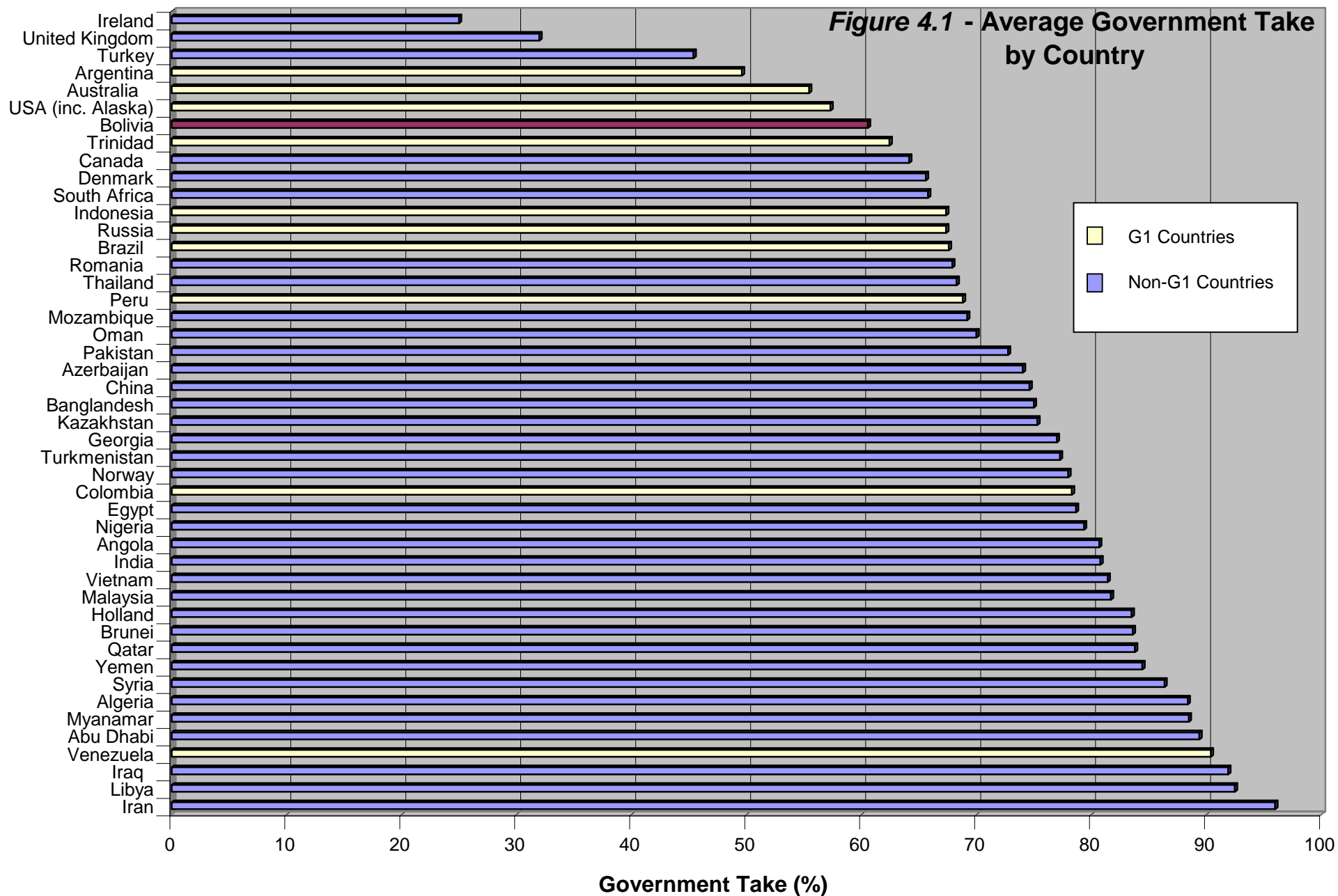


Figure 4.2 - Breakdown of Government Take - G1 Royalty/Tax Systems

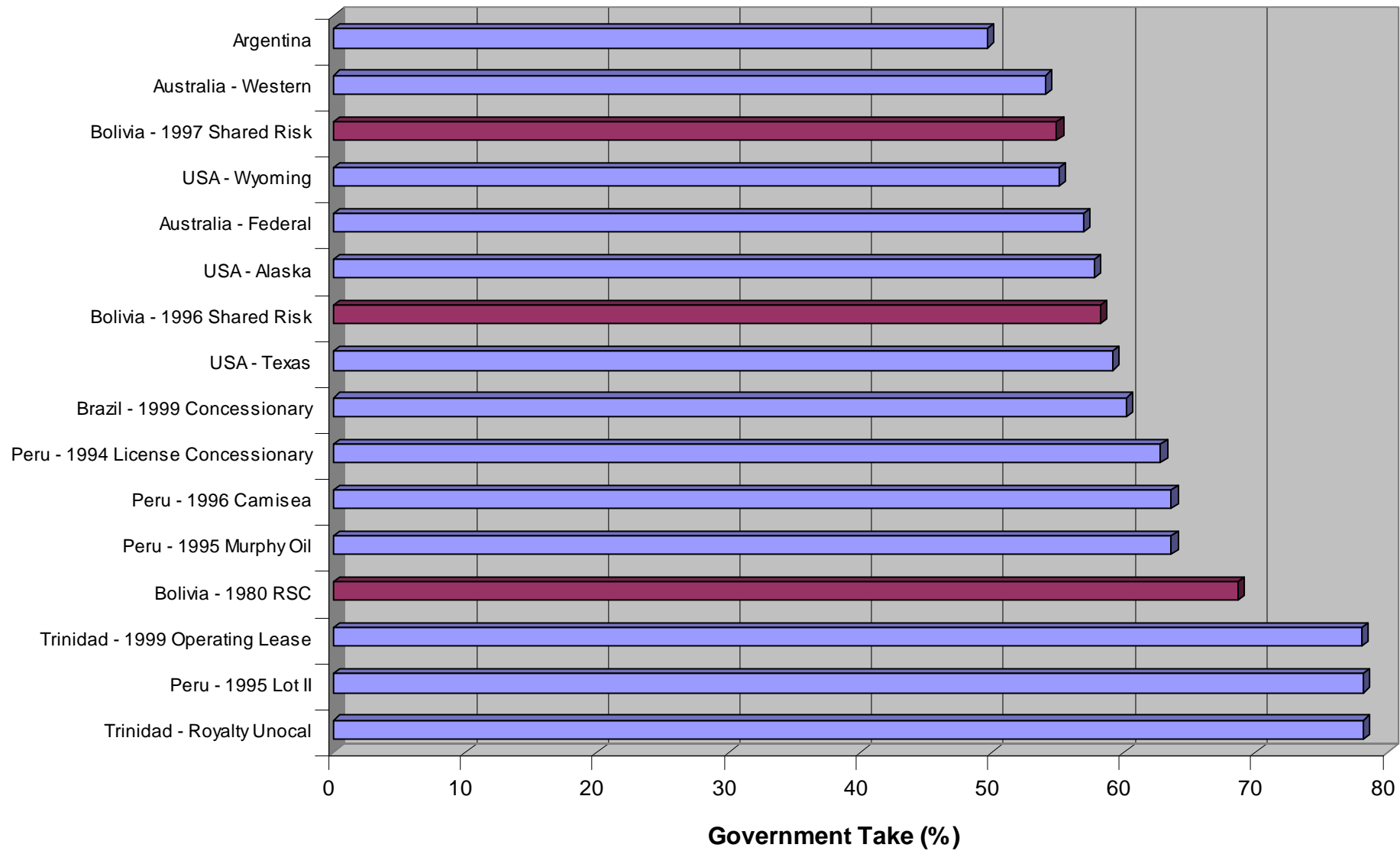


Figure 4.3 - Breakdown of Government Take - G1 Production Sharing Contracts

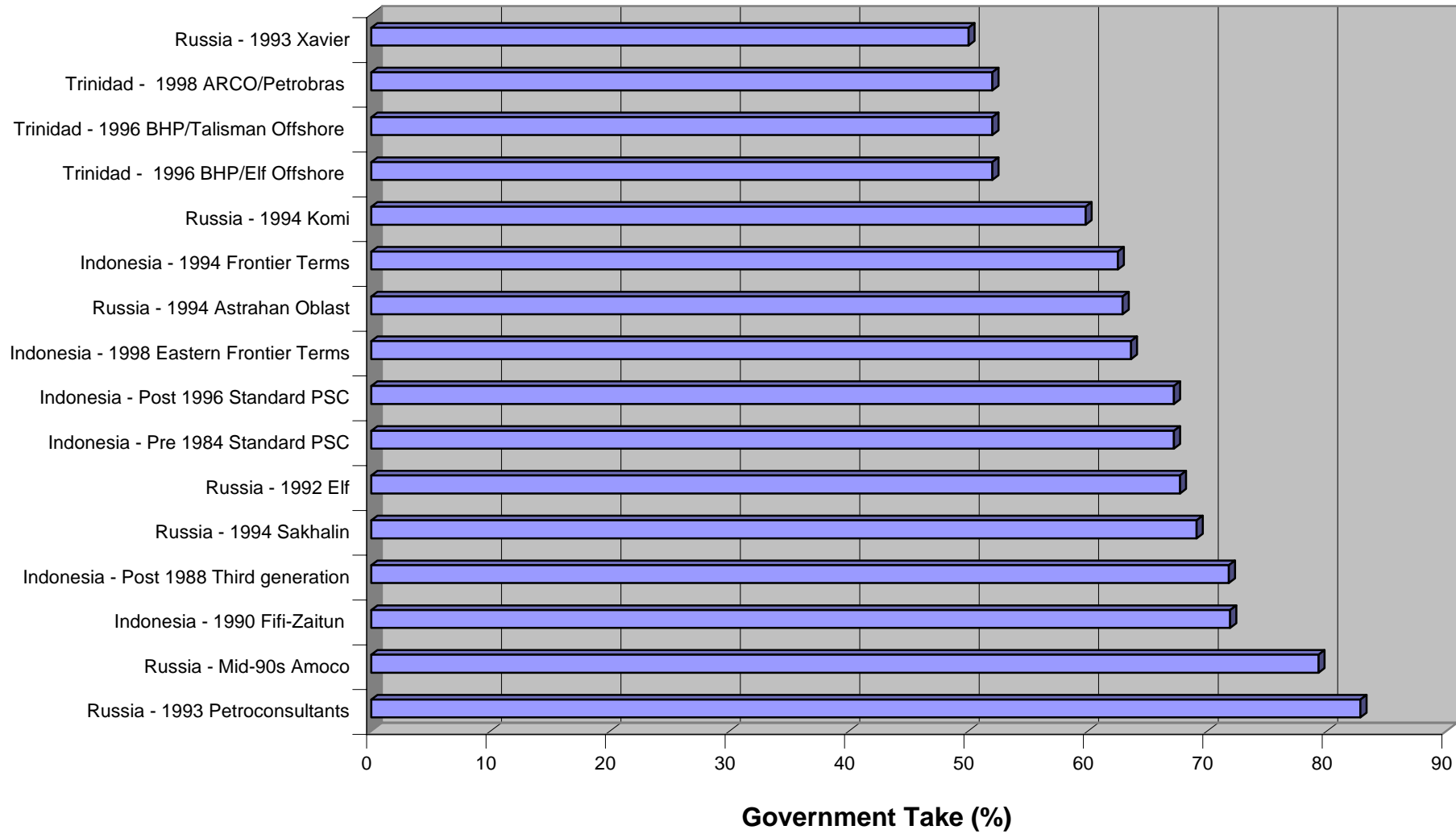
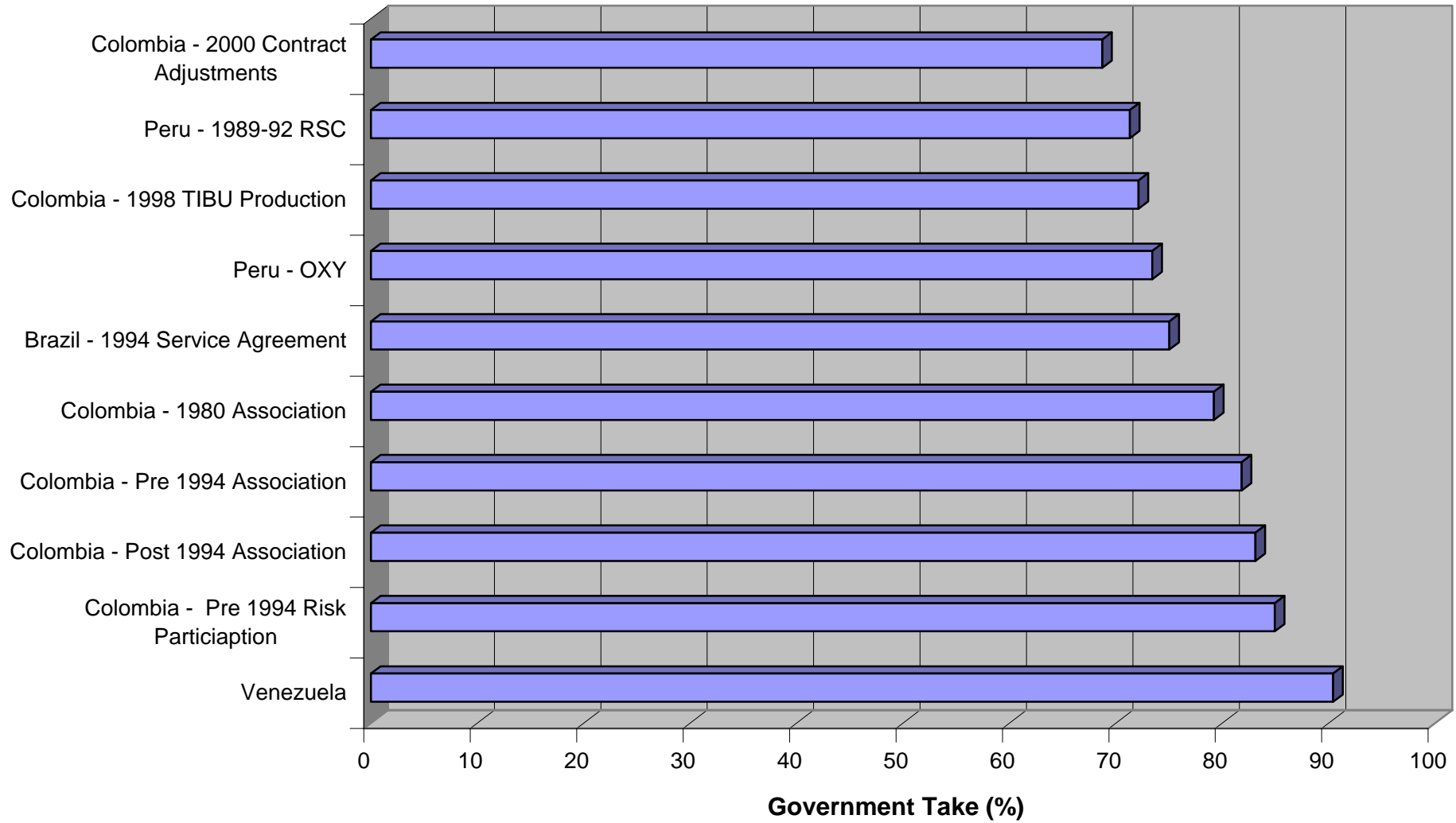


Figure 4.4 - Breakdown of Government Take - G1 Risk Service Agreements



5. Corporate Income Taxation

5.1 Introduction

- 5.1.1 Corporate income taxation is the most common feature of all international fiscal systems within the hydrocarbon sector. Income tax policy for hydrocarbons is often an area of legislation governed by a separate authority, which is updated less frequently than hydrocarbon contracts or license agreements themselves. This section provides an analysis of these income tax systems, identifying key characteristics and offering comparisons between them.

5.2 The Incidence of Corporate Income Tax

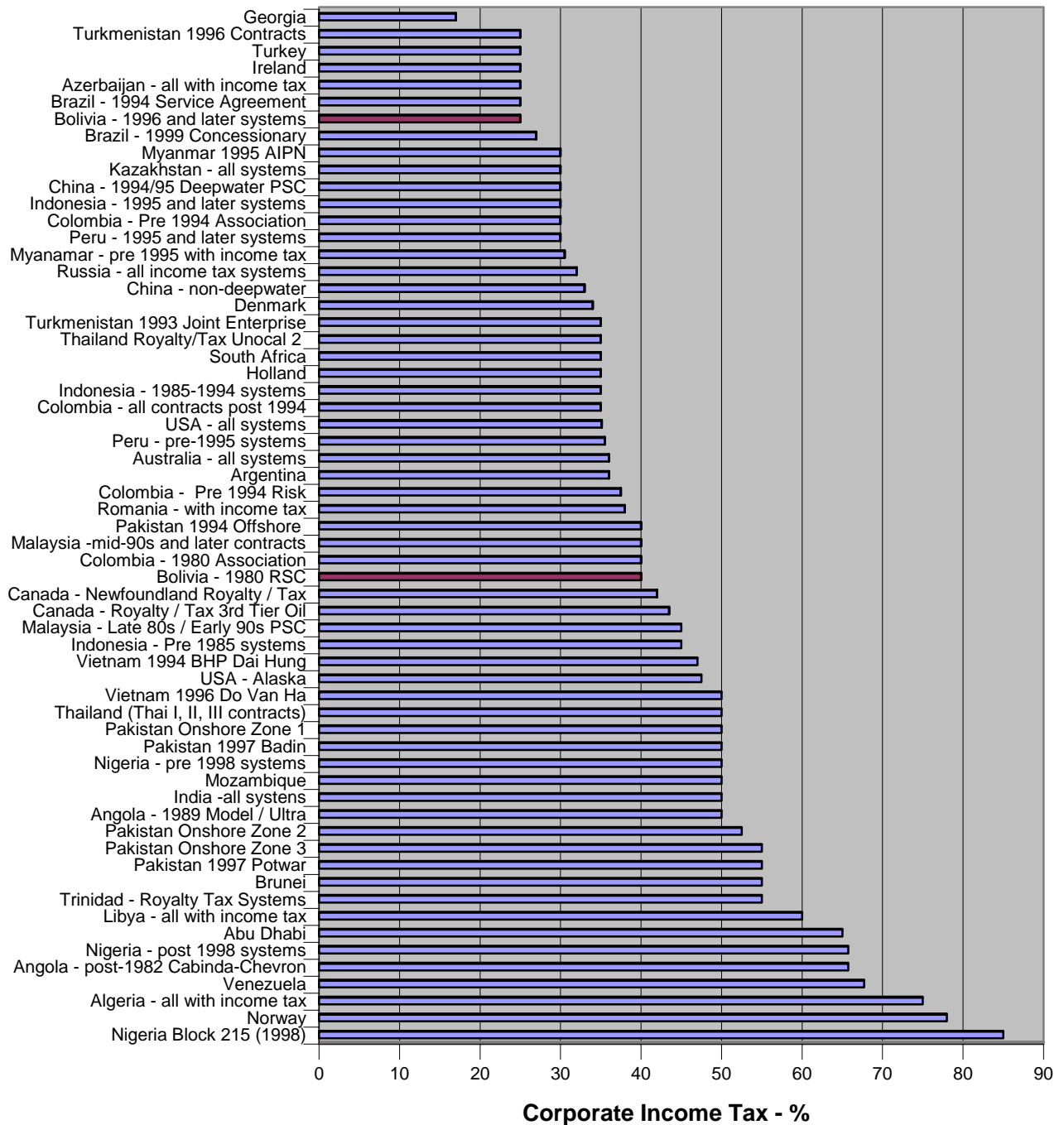
- 5.2.1 Where hydrocarbon exploration, development or production operations are taking place in a country, income derived from these operations is invariably subject to income tax in that country.
- 5.2.2 Across almost all fiscal systems, it is a contractor's "net income" that is subject to income tax. Here, net income means contractor gross revenues, less allowable deductions (see 5.4 below) and other taxes raised directly on gross incomes (e.g. royalties).
- 5.2.3 Liability to income tax typically arises on an annual basis, when details of income levels subject to tax are submitted to the authorities, together with payment of the relevant tax. Many countries employ the calendar year as their own fiscal year whilst others, like Bolivia use 31 March as their fiscal year end for hydrocarbon enterprises.
- 5.2.4 Once liability to income tax is established, two factors are then of prime importance to the level of government income tax revenue received – the rate of taxation and the amount of allowable tax deductions.

5.3 Rates of Taxation

- 5.3.1 Figure 5.1 compares the income tax rates across all countries. Rates of income tax change in accordance with updates in income tax policy itself and individual rates therefore cover a number of a Nation's hydrocarbon fiscal policies.
- 5.3.2 Of the 185 regimes compared in Section 4, 108 include income tax as a core tax with the average income tax rate being 43%.
- 5.3.3 Income tax is more common amongst the G1 regimes, with only five (two in Russia² and all three non-royalty/tax Trinidad & Tobago systems) that do not include income tax as a core tax. The average income tax rate amongst the G1 regimes is 38%.

² 1992 Elf Interneft PSC and Xavier Mines Technical Services Agreement 1993.

Figure 5.1 – Comparison of Income Tax Rates

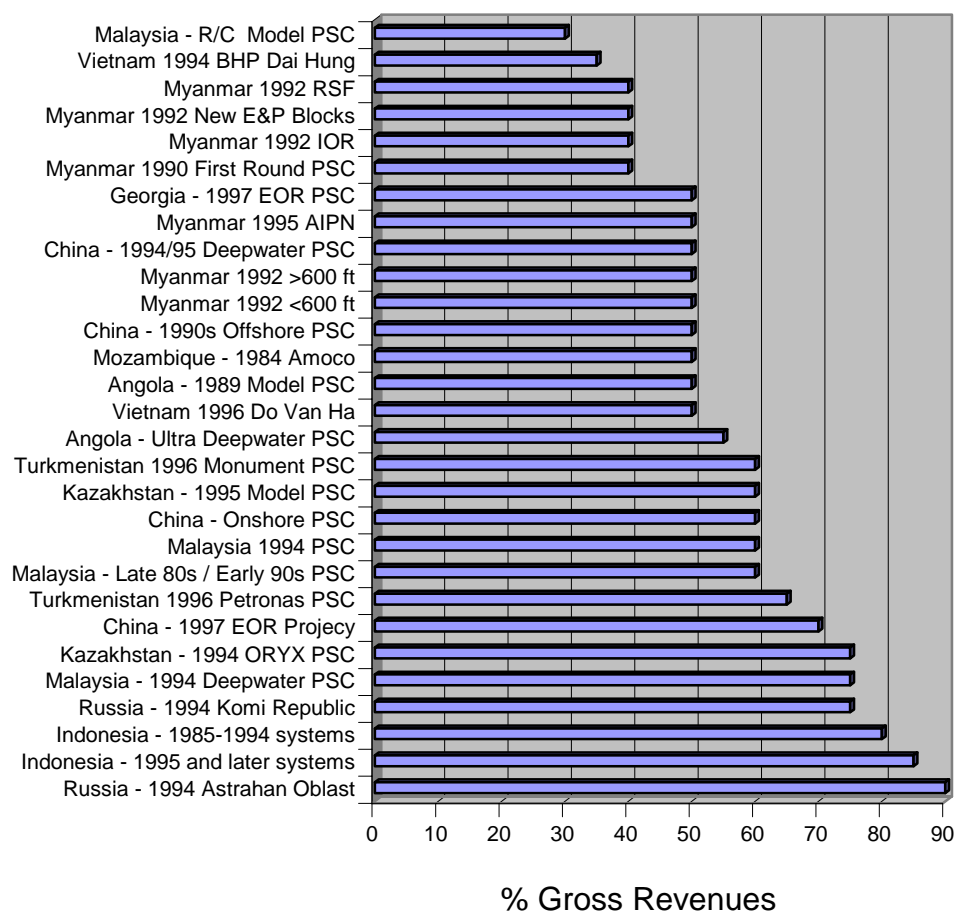


- 5.3.4 Corporate income taxes within the G1 sample group are applied at flat rates. Income tax rate policy in G1 regimes does not appear to have been used to recover the windfall profits associated with large fields. Instead, “additional profits” type taxes or surtaxes (see Section 6) have been introduced for this purpose.
- 5.3.5 Outside of the G1 sample group, sliding scale income tax rates, based on production levels or profitability measures, do exist but are rare. An example is Abu Dhabi, where three-tiered income tax rates based on production levels are set at 55%, 65% and 85%.

5.4 Allowable Tax Deductions

- 5.4.1 As discussed in section 3, to enable the benchmarking of “tax take”, costs recoverable by contractors have been assumed as 35% of gross contractor revenues. With the exception of uplifted costs or investment credits (see 5.10 below), these same costs are also typically allowable as deductions from income in calculating corporate income tax.
- 5.4.2 An exception to this is China, where there are cost recovery limits (between 50-60%), but those same restrictions do not apply in calculating allowable costs for income tax purposes.
- 5.4.3 Most general corporate taxation systems will restrict allowable costs to those that are “wholly and exclusively and necessarily” incurred in furtherance of business. The methods for strengthening fiscal policy to disallow costs that are not “wholly, exclusively and necessarily” incurred would require separate emphasis and attention and for the purposes of the comparison is limited to the overall cost recovery restrictions enforced by fiscal systems.
- 5.4.4 Some systems control the level of allowable deductions from income by an imposing an annual limit. The restriction will often operate as a function of revenues e.g. allowable deductions are restricted to 40% of annual revenue. In general terms, where such a limit is employed it is often complemented by rules allowing a deduction for costs that are irrecoverable in a particular year to be carried forward and recovered in future years.
- 5.4.5 The ability to obtain future deductions for past costs is particularly important in hydrocarbons such as Liquefied Natural Gas (LNG), where there are huge upfront capital costs of gas field development, liquefaction and construction of transportation and receiving terminals. Whilst annual operating costs may typically amount to between 15% and 30% of gross revenues, large costs from exploration and development phases which have been not previously been deductible are commonplace. Most systems capitalise and depreciate purely capital costs (see 5.7 below), but some systems permit capital expenditure as a full income expense.
- 5.4.6 Annual limits on tax deductible expenditure have the effect of restricting relief from past costs. 27% of all systems analysed include such limits and Figure 5.2 compares these limits.

Figure 5.2 – Cost Deduction Limits for Income Tax Purposes



5.4.7 It is evident that where cost deduction limits exist as a percentage of gross revenues annual tax losses cannot be created. Instead, excess costs are carried forward and relieved where possible in future periods.

5.4.8 Items that can be carried forward and set against future profits constitute:

- i) Tax Losses (where no C/R limit exists)
- ii) Unrecovered Costs (where C/R limit exists)
- iii) Unused Depreciation/Amortisation Allowances
- iv) Government Royalties paid
- v) Government Signature / Production Bonuses paid

(iv) and (v) are both typically deductible for income tax purposes. For a comparison of royalty and bonus rates across fiscal systems, see Sections 7.2 and 7.3.

iii) will not apply to systems that permit capital expenditure as a full income expense, although these systems are now rare due to the negative cash flow effect created for governments.

5.5 Ring-fencing of Costs

- 5.5.1 In many of the identified fiscal systems costs relating to a particular field or license must be deducted from revenues generated from that same field or license. The license is said to be “ring-fenced.”
- 5.5.2 Where ring-fencing is not applied, e.g. Bolivia and Norway, governments assess income tax on country-wide revenues net of costs, meaning that excess costs from one operation can effectively be set against excess incomes from another. Ring-fencing can have a substantial limiting effect on the level of taxable income for the contractor and means that governments do not subsidise contractor’s unsuccessful projects.
- 5.5.3 The problem with ring-fencing is that a contractor may view this as further risk and consequently may not wish to explore and develop what appear to be marginal fields because of an inability to recoup potential losses.
- 5.5.4 Figure 5.3 shows the split of G1 systems that have introduced ring-fencing of some kind for income tax purposes.

Figure 5.3 – Ring-fencing of individual licenses for Income Tax purposes

<u>Ring-fencing</u>	<u>No Ring-fencing</u>
Brazil	Argentina
Colombia*	Australia
Indonesia	Bolivia
Russia	Peru
Trinidad & Tobago	United States – Alaska
Venezuela	United States

** = not on exploration phase expenditure if it contributes to a discovery.*

Across all countries, of the 108 systems with income tax 79 impose limits on allowable deduction levels. The average rate amongst those systems is 56% of gross revenues.

- 5.5.5 In addition to the prevention of cross-license cost recovery, fiscal systems enforce further restrictions on deductible items. Under many systems deductions for administrative expenditure and overheads are restricted to a percentage of gross revenues.

5.6 Interest Costs

5.6.1 Interest paid on capital is typically permitted as a deduction against income for income tax calculation purposes. To prevent relief for artificially high levels of interest on borrowing from a related party (e.g. overseas parent company) restrictions are frequently imposed. These restrictions may take one, or a combination of the following:

- i. Restrictions on the level of capitalisation impose a maximum debt level based on the debt:equity ratio of the borrowing company. This prevents “thin capitalisation” in the form of loans that would not be considered by unconnected parties. Interest paid on amounts in excess of the designated capitalisation threshold (commonly 2:1 or 3:1 debt:equity ratio) is either disallowed as a deduction or treated as a distribution rather than interest and may be subject to withholding tax (see Section 7.5).
- ii. Restrictions prescribing the rate of interest on borrowings from connected parties. This prevents artificial rates of interest being charged without reference to the level of capitalisation of the company.

5.6.2 Identifying market interest rates is relatively straight forward. However, in order to arrive at a commercial level of debt and/or interest for a specific contract, economic risk factors must be applied to prevailing market rates. In this way, determining such an adjustment can be a complex process.

5.7 Depreciation

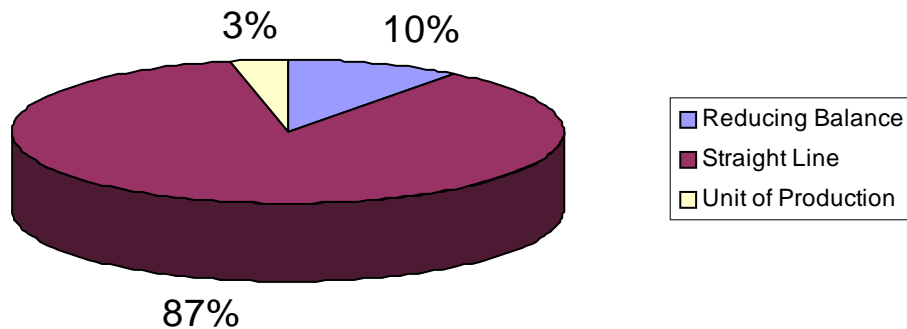
5.7.1 Only a small minority of the world’s systems fully expense capital costs in the year of expenditure, with the remainder using capital asset depreciation (or amortisation for intangible assets) as a means of spreading the deductibility.

5.7.2 More favourable treatment is sometimes accorded to capital expenditure during the exploration and development phase. This often takes the form of higher annual depreciatory rates, but the majority of fiscal systems delay the availability of allowances on assets acquired during exploration and development phases until production commences.

5.7.3 In the G1 countries, Australia, Brazil, Colombia and Trinidad & Tobago all offer preferential depreciation treatment to capital expenditure incurred in the exploration phase. In Australia and Trinidad & Tobago costs can be fully expensed, whilst in Brazil and Colombia the treatment is an item of negotiation between Government and contractor.

5.7.4 Figure 5.4 shows the breakdown of systems that use the three main types of depreciation (straight line, reducing balance and unit of production).

Figure 5.4 – Depreciation Methods Used



- 5.7.5 Depreciation policy is infrequently modified and typically does not vary between a particular nation's fiscal systems. Reducing balance and straight-line policies provide for assets to be written down over a period of between three and eight years, with 5 years (i.e. 20% per annum) being the most common annual income tax allowance.
- 5.7.6 The "Unit of Production" method of depreciation differs from the other two, in that it is specifically designed for the hydrocarbon industry. It attempts to match costs with the production and this typically results in a longer depreciatory scale, particularly in the LNG sector where production life is typically around 25 years.
- 5.7.7 Although it only applies to 11% of the systems analysed, "unit of production" based depreciation is more widespread amongst the G1 countries. It is the system adopted in Argentina, USA, Alaska and Venezuela, all of which have only one or two fiscal systems.

5.8 Decommissioning & Abandonment Costs

- 5.8.1 Tax relief for abandonment and decommissioning costs can be a problem for the contractor, due to the lack of revenues in the period of license cessation. Where individual licenses are not "ring-fenced" abandonment costs are typically available to set against revenues from other licenses in the same period.

- 5.8.2 The problem appears to be heightened where individual license ring-fencing exists. However Generally Accepted Accounting Policy (GAAP), which is increasingly influential in the formulation of national income tax policies, requires provisions for readily identifiable and quantifiable future costs to be made prior to expenditure being incurred. Commonly such costs are spread over a period of production to which they relate.
- 5.8.3 As abandonment is a normal and expected procedure, estimated costs can be amortised and offset against income during production years. These costs must remain within any overall limits that may exist.
- 5.8.4 Azerbaijan's 1994 AIOC PSC includes specific provisions for abandonment costs, with amounts becoming recoverable once 70% of production is complete.
- 5.8.5 Under most PSCs and RSAs, ownership of assets and facilities used in exploration, development and extraction typically lies with the government. In this case, liability of abandonment or decommissioning lies with the State and the tax treatment of such costs is not an issue.

5.9 Tax Loss Treatment

- 5.9.1 Tax losses will only exist where allowable cost deduction limits (as a percentage of gross revenues) do not.
- 5.9.2 The ability to carry forward losses against future income is more beneficial for contractors than the carry forward of excess costs, due to there being less restrictions on when the loss can be relieved. In Turkmenistan, losses can only be carried forward for a maximum of five years, which restricts the additional benefit that losses can offer.
- 5.9.3 Where losses exist for a particular period, they can typically be carried forward and offset against future revenues from the same license for income tax purposes. Where "ring-fencing" does not exist it may also be possible to set losses against net revenues from other hydrocarbon operations in the same country in the same period.
- 5.9.4 In most systems signature or production bonuses and royalties, where they are deductible for income tax purposes, also form part of tax losses available to carry forward.
- 5.9.5 Ultimately, it is a combination of the "ring-fencing" and cost deduction limitation that dictate the ways and extent to which tax losses are available to offset taxable income.
- 5.9.6 The potential to carry-back losses for income tax purposes (which forms part of some nations' wider corporate income tax policy) would provide little additional attraction to contractors, due to the nature of hydrocarbon operations.

5.10 Exploration and Production Investment

- 5.10.1 Some fiscal systems offer investment credits and/or uplifts on capital expenditure as a form of incentive for contractors to make exploration and production investment.
- 5.10.2 Investment credits are restricted to specific facilities. In Indonesia for example, a 17% investment credit applies only to oil platforms, pipelines and processing equipment. This means that 117% of the cost of these assets can be deducted for income tax purposes, with any non-deductible amount available to carry forward.
- 5.10.3 General capital cost uplifts, typically at a flat rate of between 10% and 20% permit the contractor to deduct between 110% and 120% of the total cost of all capital investment made in the E&P process in the host nation. The full amount (including uplift) is tax deductible in the year of expense, with no need to depreciate as with other assets.
- 5.10.4 It is important to distinguish between uplifts and credits for cost recovery purposes and for income tax deductibility purposes. Under most PSCs and RSAs, an uplift allowable for both cost recovery and income tax purposes would effectively provide more than the desired rate of relief on an amount that has never actually been invested by the contractor. Most PSCs and RSAs therefore do not allow the uplift or credit element as an income tax deduction.
- 5.10.5 Some fiscal systems restrict the availability of uplifts and credits to surtax with the allowable cost for income tax purposes being the actual amounts invested.
- 5.10.6 Australia provides for cost uplifts of around 23% on exploration and 13% on development type expenditure for surtax calculation purposes. Bolivia offers more generous 100% uplifts on operational expenditure recoverable at 33%/year over three years for surtax purposes only.

5.11 Other Incentives – Tax Holidays

- 5.11.1 A flexible hydrocarbon policy can also provide terms to encourage further investment through tax and/or royalty holidays. Examples include Georgia and Myanmar. Myanmar offers three full years exemption from income tax as an incentive, whilst Georgia adopts one full year, followed by a further four years with 50% tax relief.
- 5.11.2 Over a given period (typically three years) an exemption is provided from income tax on profits (in addition to royalties on gross revenues). The timing of the holiday is important for the contractor, with the start of the holiday usually being the commencement of production. This also means that where there is no discovery or production, then there is no benefit for the contractor.

6.

Surtax

6.1 Introduction

- 6.1.1 Surtax is a popular method of increasing the level of taxation on large or particularly profitable fields. It is perhaps the most progressive means of taxation, due to the point at which it is levied (after income tax) and the way in which it is calculated.

6.2 The incidence of surtax

- 6.2.1 Income subject to surtax is generally calculated in the same way as for income tax, with allowable deductions for costs incurred. Surtax policy often forms an extension to the income tax policy of a particular nation. The detail of how the surtax is calculated varies greatly between countries. Surtax is usually collected at the same time as corporate income tax, although it can be levied on profits pre or post income tax. It can take the form of either a flat rate or be dependent on profitability (or some proxy for profitability such as increases in resource production).

6.3 Method of calculation

- 6.3.1 Of the G1 countries, Australia, Bolivia, Brazil and Venezuela assess surtax on gross revenues less costs and royalty whereas Colombia and Russia calculate surtax after the additional deduction of corporate income tax.
- 6.3.2 Of the 23 regimes with surtax, only Brunei offers no deduction for royalties paid by the contractor when calculating surtax.

6.4 Fixed Rate Surtax

- 6.4.1 Of the G1 regimes Federal Australia, Bolivia 1997 Risk Service Contracts, Brazil 1994 Service Agreement, Colombia Pre 1994 Association Contract and Russia 1993 Petroconsultants all operate fixed rate surtaxes. These vary between 10% for Brazil (1994) and 40% for Federal Australia (1993).
- 6.4.2 Overall, 15 of the 23 surtax policies are fixed rate.
- 6.4.3 In Bolivia the surtax is only charged on the most profitable fields, defined as those, which are able to repay double the invested capital. In this respect it can be considered a two-tiered system.
- 6.4.4 The Brazil 1999 Concessionary System also has a fixed rate surtax of 10% however for very large fields there is an additional secondary surtax based on a sliding scale (see sliding scale surtax).

6.5 Sliding Scale Surtax

- 6.5.1 The remaining 8 surtax policies are sliding scaled. These are a more progressive form of taxation and are summarised in Figure 6.1.
- 6.5.2 Sliding scale rates are based on the level and profitability of production and hence levy a greater tax burden on larger/ more profitable fields. Usually there is a minimum production level required before the surtax comes into force.
- 6.5.3 With the exception of Bolivia, all post 1995 contracts analysed in this report base surtax calculations on a sliding scale, specifically aimed at taxing “windfall profits”.

Figure 6.1 - Summary of Sliding Scale Surtax methods

Country	Rate %	Method
Australia – Western (RT)	0-35%	Sliding scale annual production tax*
Brazil 1999 Concessionary contract (RT)	10% & 0-15%	Regular fixed rate surtax and a sliding scale tax based on production levels *
Kazakhstan 1992 Chevron (PSC)	0-25%	Excess profits tax based on net cash flow ^
Kazakhstan 1995 Model (PSC)	0-50%	Excess profits tax based on “aggregated internal profit rate”^
South Africa (RT)	20-40%	Additional normal tax based on R factor.^
Thailand Thai III (RT)	15-30%	Special remuneratory benefit based on annual profits divided by cumulative depth of wells drilled.^
Turkey 1990s (RT)	7-10%	Sliding scale surtax.^
Venezuela (RS)	0-50%	PEG is a sliding scale profit tax determined before income tax. °

° Levied on pre-tax profits, and deductible against income tax.

* Levied at the same time as income tax

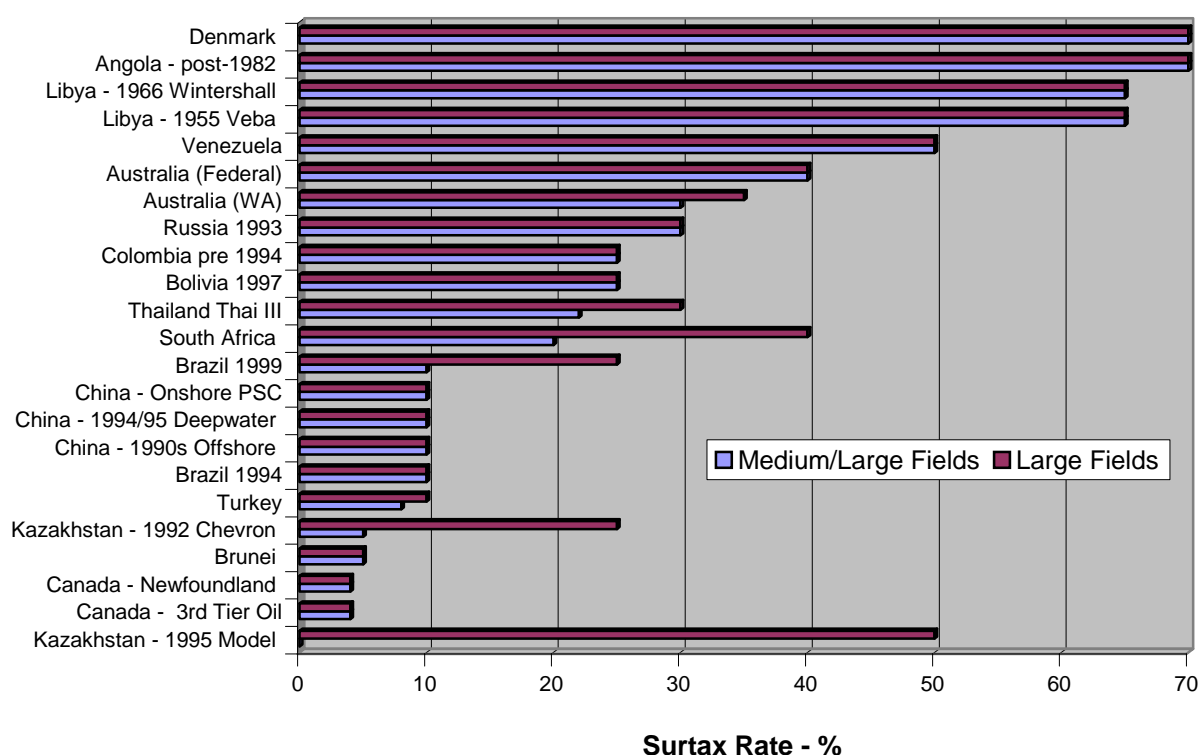
^ Calculated after income tax deductions

- 6.5.4 Western Australia operates a surtax calculated on the annual production of oil. The surtax increases in increments of 10% depending on the number of barrels of oil produced per day (BOPD). Below 8,630 BOPD the surtax is zero, however above 13,792 BOPD the surtax is capped at 35% (no specific information was available for gas production).
- 6.5.5 The Brazilian 1999 Concessionary System, in addition to the fixed rate surtax of 10%, introduced a complex “special tax” on excess profits. The surtax varies between 0-15%, with no tax charge being incurred below 31,000 BOPD (no specific information was available for gas production).
- 6.5.6 Venezuela operates a flexible “PEG” tax levied on pre tax profits. The PEG tax is determined using a bidding system, where the licence is awarded on the basis of the PEG bid (0-50%), and an additional secondary bonus bid (see section 7.3). In most large fields the PEG tax has the maximum value (50%) with the rate being determined by the contractor.

6.6 Rate of taxation

- 6.6.1 Surtax rates for the different fiscal systems compared in figure 6.2. The rates have been calculated and compared for both large fields i.e. when the surtax take figure is a maximum, and medium/large fields. In this case medium/large fields are identified as being approximately three quarters of the way up the production level/profitability scale. In both cases the Venezuelan surtax figure has been assumed at 50%, as this holds for the majority of sites.
- 6.6.2 To a greater or lesser extent, both project sizes compared in figure 6.2 mirror profitable fields demonstrating a element of “windfall profits.”

Figure 6.2 - Comparison of Surtax Rates for Medium/Large and Large Fields



- 6.6.3 The mean surtax rates for medium/large fields is 26%, with the large field average being 5% higher.
- 6.6.4 For both field sizes Denmark’s “Hydrocarbon Tax” and Angola’s “Petroleum Transaction Fee” share the largest additional take arising from surtax. These are both fixed rate policies.
- 6.6.5 In the G1 countries, Venezuela has the largest additional take from surtax. This is particularly interesting as Venezuela also has the largest hydrocarbon government take of the G1 regimes. However it should be noted that the PEG tax relies on a bid system, hence although in the majority of cases the surtax is a maximum (50%), the PEG rate can be lower in smaller marginal fields.

6.6.6 The lowest surtax figure is for Canada. This contract is set at a low rate and is not maximising the potential take for larger fields.

6.7 Ring- fencing.

6.7.1 In addition to ring- fencing policy as discussed in section 5.5, some countries determine whether or not profits should be subject to surtax based on individual license profitability. This ensures that surtax is raised as widely as possible.

6.8 Tax Relief for Costs Incurred

6.8.1 Allowable cost deductions are generally calculated as for income tax (see section 5.4). Additional cost uplifts are sometimes granted for surtax calculation purposes, as per section 5.10.

7.

Royalties

7.1 Comparison

7.1.1 Of the four core taxes, royalties are the most common amongst systems analysed. 114 of the 185 (62%) of regimes contain royalties. This is also reflected in the G1 systems, with 27 of the 42 regimes (64%) containing a royalty element.

7.1.2 The majority of royalties are calculated on gross revenues before the deduction of costs. Variation, however, can arise when there is more than one royalty and an additional deduction occurs after the primary royalty has already been levied. One example of this is Argentina, which calculates a fixed federal royalty of 12% on gross revenues and then applies a provincial sales tax royalty with a sliding scale between 1-3% on the net revenues.

7.1.3 Royalties can be fixed rate or sliding scale based on profitability of the field. In a number of regimes a combination of both methods of calculation are used (as seen in the Argentinean example above).

7.1.4 Sliding scale royalties can be calculated based on a number of factors:

- i. Production: An incremental sliding scale based on the average daily production. The size of the tranches within the sliding scale will always be contract dependent and are primarily dictated by the anticipated size of the discovery. The fiscal regimes of Colombia 2000, Russia 1992 and Peru 1995 all have a production based royalty scales
- ii. R Factor: R factor is an average profit factor and can be defined as

$$R = \frac{\text{Cumulative net revenues}}{\text{Cumulative expenditure}}$$

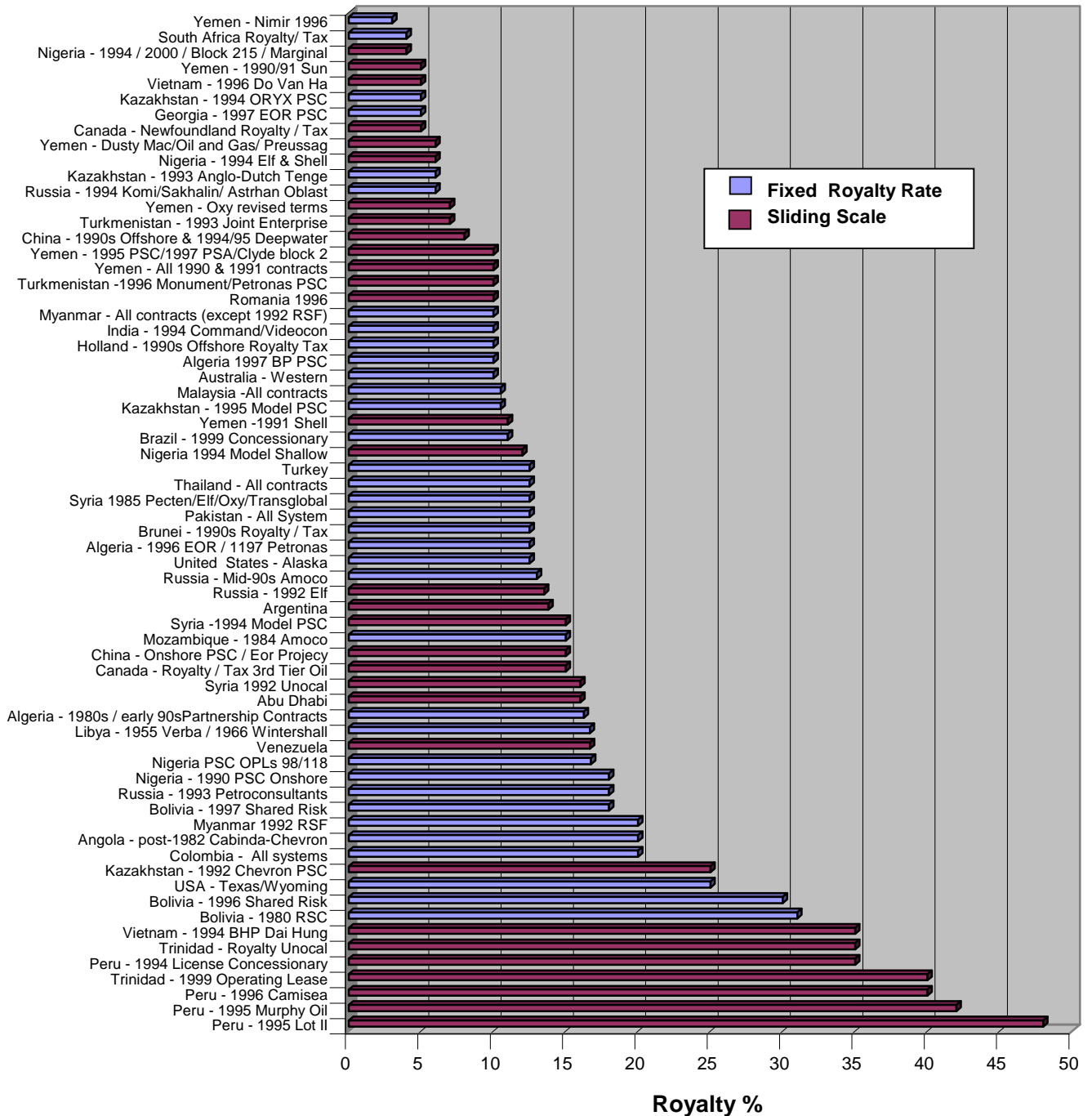
Peru (with the exception of the 1995 contract) formulate their royalty rate based on an R factor sliding scale combined with the market values of resource. In a typical Peruvian contract (1996) as R factor varies between 0 - 4 royalty for gas varies between 7% and 47%. However for oil the sliding scale has three tiers depending on the price per barrel of oil. If the oil has a market value less than \$15 a barrel (BBL) royalty varies between 20-42%, if the oil cost between \$15-\$35BBL royalty "slides" between 23-46% and greater than \$35BBL the royalty will have values between 27-50%

- iii. Profits: Royalty rises incrementally with predetermined increases in field profitability (Russia-Astrahan Oblast)
- iv. ROA (Return on Assets): Venezuela have a royalty system based on ROA

$$ROA = \frac{\text{pre tax profits}}{\text{asset book value}}$$

7.1.5 The royalty rates have been compared in figure 7.1, where a sliding scale has been used we have taken a figure three quarters up the scale to reflect potential government take available for large fields.

Figure 7.1 – Comparison of Royalty Rates



- 7.1.6 From figure 7.1 it can be seen that for medium/large fields the royalty figure varies between 3% in Yemen (Nimir) and 48% in Peru, with the average royalty rate being 14% across all systems (21.8% in G1). The top seven systems in terms of royalty rates all adopt a sliding scale or combination method in calculation.
- 7.1.7 Basing the royalty rate on a sliding scale is a progressive form of collecting royalties as it increases the take on the larger, more profitable fields without placing a burden on smaller projects. It may be useful to note that some systems allow netback of transportation costs against royalties. This occurs when there are material differences between the point of valuation for royalty calculation purposes and the point of sale.
- 7.1.8 Some regimes use flat rates, but allow for some form of progression by varying the rates according to the likelihood of production. In Algeria (late 1980s contracts) the royalty rate in unexplored areas is 12.5%, compared with 20% in already producing areas.

8. Other Forms of Taxation

8.1 Introduction

- 8.1.1 In addition to the core taxes discussed in section 3, many fiscal regimes include “other taxes” which either do not occur on an annual basis (such as commencement bonuses) or are difficult to quantify within the scope of the report (VAT, remittance tax, rentals). Although these taxes fall outside the basic government take calculations, they are a useful way of increasing revenues. In this section these taxes will be reviewed and where applicable comparisons are made across the different fiscal systems.

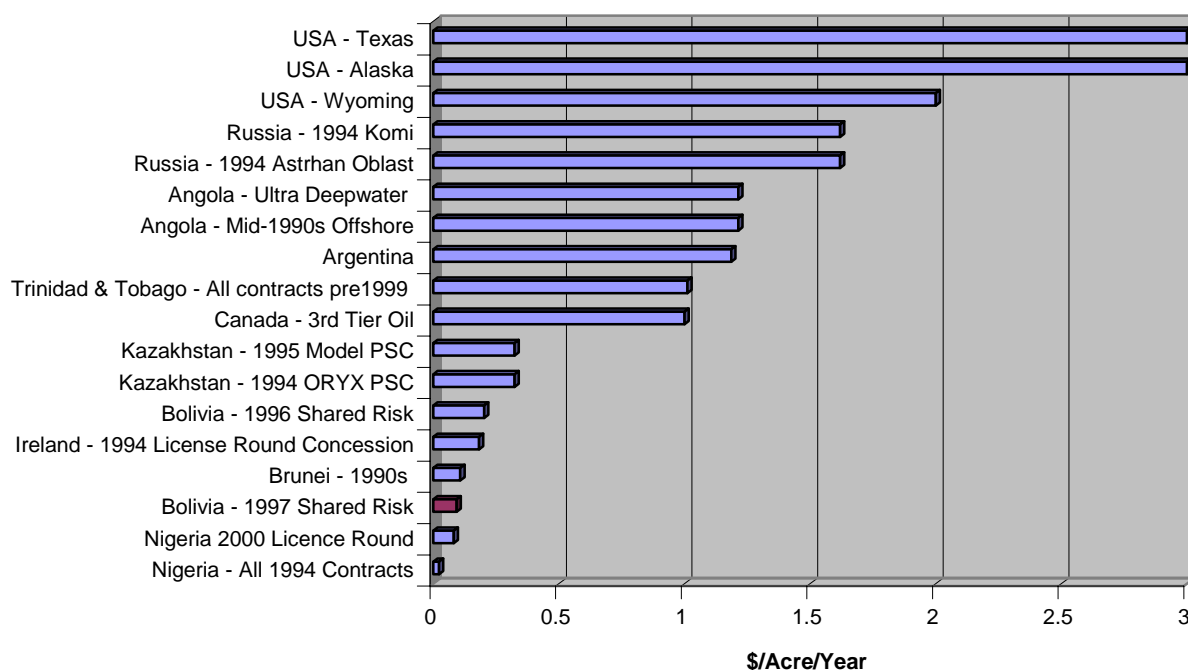
8.2 Bonuses

- 8.2.1 Overall government revenue is often increased through the use of bonuses. The most prevalent forms of bonus are signature and production bonuses.
- 8.2.2 Signature Bonuses take the form of cash and are paid on the finalisation of a contract. Of the G1 regimes considered in this report, Brazil, Russia, Venezuela and Indonesia all contain some form of signature bonus (ranging from \$500,000 to \$14m). The majority of signature bonuses are negotiable (in the case of Venezuela the bonus is biddable with a minimum \$500,000 guaranteed) and are not recoverable through cost recovery. Although not recoverable some countries, e.g. Indonesia, allow bonuses to be deducted in the calculation of income and withholding taxes.
- 8.2.3 Production Bonuses are paid when the production from given sites reaches a predetermined level. Production bonuses may be incurred when threshold production levels are met (such as a start up bonus in Russian and Vietnamese agreements) or when cumulative production landmarks are exceeded. Examples of landmark production bonuses are Indonesia whose 1990 contract includes a \$1m bonus at 25,000 and 50,000 BOPD and \$3M at 100,000 BOPD, or Russia Komi Republic 1994 contract which has a bonus of \$3m at 15,000 and 30,000 BOPD.
- 8.2.4 Contracts may also include bonuses that apply to different stages of the life cycle of the field: exploration, discovery and production. The most common bonuses are listed below
- i. Training Bonuses, applicable throughout the life cycle of the field, although rates \$/year usually change (Peru 1994, Pakistan, Syria and Trinidad and Tobago contracts)
 - ii. Research and development fees \$/year (Trinidad and Tobago)
 - iii. Technical assistance bonus, one off payment (Trinidad and Tobago)
 - iv. Data Package; The government introduces a clause that the contractor must purchase geological and geophysical information at a given price (Venezuela, Vietnam and Russia 1992).

8.3 Rentals

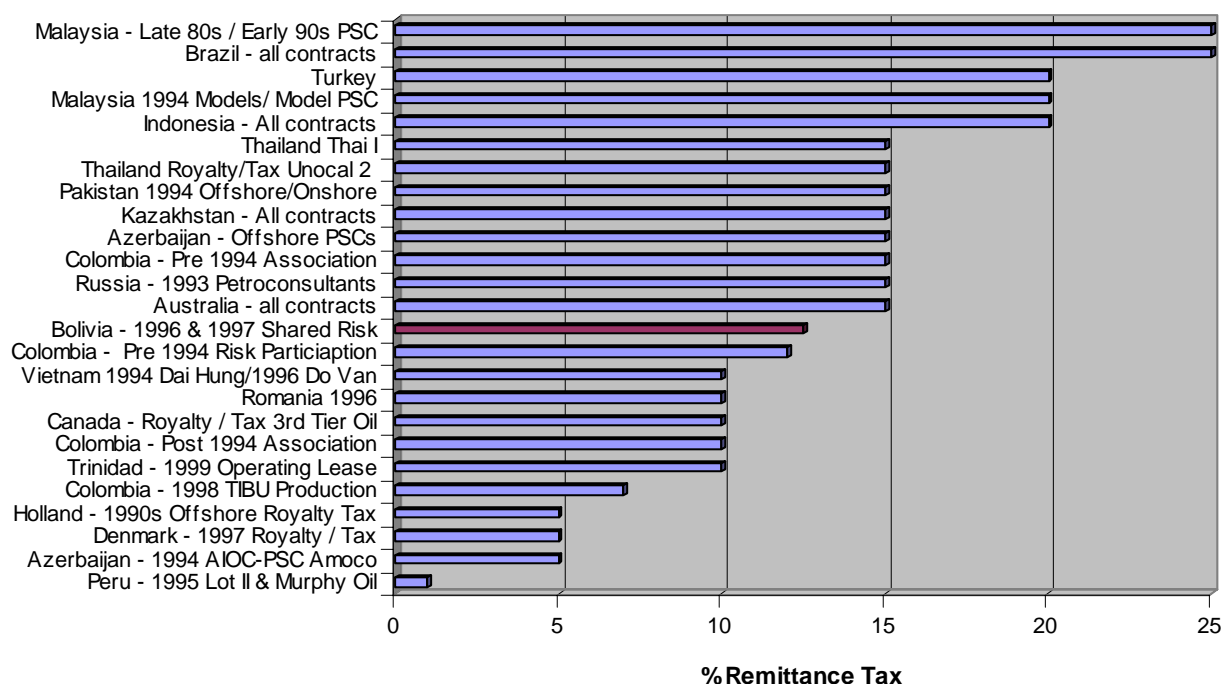
- 8.3.1 In contrast to the one off payments that characterise bonuses, rentals are spread over the lifetime of the field, and hence are seen as a more attractive option by contractors. Of the 30 regimes that include rentals, 22 are calculated on the area of the field and are sometimes levied in local currency (e.g. Argentina, Nigeria, Brunei and Ireland).
- 8.3.2 There is a degree of variation in the calculation of rentals examined. Some are only charged for a fixed number of years (e.g. Bolivia 1997 Risk Service agreement calculates rentals over 3 years). In others, rental rates increase annually as agreed in advance, e.g. in Russia's Astrahan Oblast & Komi contracts 1994, which increase rentals from \$20/km² in the first year to a maximum of \$400/km² in the fifth and following years.
- 8.3.3 Figure 7.2 compares the rental rates where calculation is based on field size. Where paid in local currency (see 8.3.1 above) exchange rates have been used to calculate the US dollar equivalent.
- 8.3.4 Where a sliding scale rental agreement is established (Argentina, Russia, Trinidad and Tobago) the value used is the rental in the fifth year, as this represents an established field. This graph excludes rental agreement from the fiscal regimes of Western Australia, who charges rental on block/year basis (where the block is the license area) and Russia Sakhalin 1994 contract that calculates rent as 1-2% of the cost of the work program.

Figure 7.2 Comparison of Rental Agreements



- 8.3.5 Rental agreements vary between the equivalent of \$0.02/acre/year (Nigeria) to \$3/acre/year (United States, Alaska and Texas). The average rental rate is \$1/acre/year.
- 8.3.6 Eight systems that include rentals use a separate means of calculation. Four (Abu Dhabi, Oman, Qatar and South Africa) adopt fixed annual flat rates, with the remainder either negotiable or based on other factors such as work program costs or land type.
- 8.4 Remittance and withholding tax
- 8.4.1 Remittance and Withholding taxes are direct taxes on non-resident corporations imposed by the host government. They are levied on payments, such as dividends and interest, and the transfer of assets out of a country.
- 8.4.2 A summary of remittance and withholding tax rates for the nations reviewed in this report have been presented in figure 7.3, with rates ranging from 1% (Peru) to 25% (Malaysia) and an average rate of 13%.

Figure 7.3 - Comparison of Remittance/Withholding Tax Rates



8.5 Value Added Tax / Sales Tax

- 8.5.1 Value Added Tax (VAT), and other similar indirect taxes (e.g. Sales/Transaction Taxes), can be useful additional sources of government revenue, but are ultimately borne by the final consumer, with the contractor effectively acting as tax collector for the host government.

- 8.5.2 Only four of the G1 countries included VAT/sales tax details in their contracts. Sales tax varies between a 2% in the United States (Texas and Alaska) to approximately 32% (average) in the Brazilian 1999 Concessionary contract which includes a Municipal VAT at 2-5%, a State VAT (17-18%) and a Federal VAT which has a typical range of between 5-20%.

8.6 Import and export duties

- 8.6.1 Bolivia (5%) and Pakistan (3%) are the only contracts amongst those analysed to specifically refer to import tax. Under most systems contractors negotiate exemption from import duties. Under PSCs and RSAs this is partly due to the fact that title of assets brought into the host country for operational purposes passes to the state.
- 8.6.2 Export tariffs are very uncommon in the sample of modern systems used. In many hydrocarbon projects, the export of final resource is one of the main aims (after any domestic market obligations have been satisfied). Governments may therefore not seek to directly discourage resource exportation through the levying of export tariffs.

8.7 Other Taxes

- 8.7.1 Domestic market obligations (DMO) describe the option given to the state to purchase a certain amount of the contractors share of production. The quantity and purchase price is agreed in the contract and it is typically less than the market value. In all the systems analysed, only 13.5% employ contractually termed DMOs.
- 8.7.2 DMOs are often based on a pro-rata share of annual production. In the case of Indonesia this does not commence until 60 months after production commencement, when the contractors have to supply the state with 25% of "share oil" for \$0.2 per barrel.
- 8.7.3 As an anomaly, Libya's 1999 Contract effectively employs a "reverse market obligation" with the contractor having the right to purchase 50% of the government's resource share at market price.
- 8.7.4 Severance Tax is an additional tax on the physical extraction of hydrocarbons, usually levied as a percentage of the gross value of the minerals/petroleum removed. The tax can also be levied on the basis of quantity i.e. per million cubic feet of gas or per barrel. Of all the contracts reviewed only the United States include a severance tax.

State	Severance Tax
Alaska	Higher of 12.5% for 4 years then increasing to 15% thereafter or \$0.8 per barrel of oil
Texas	7.5% for gas or 4.6% for gas
Wyoming	6.0% for oil reduced to 4.0% for stripper wells

The method of valuation of hydrocarbons to calculate the severance tax is contract dependent (see section 8.2)

9. Other Tax Matters

9.1 Introduction

- 9.1.1 The effective application of all taxes is dependant upon information. A concern for many governments is that the contractor provides much of this information. Companies must be subject to an efficient compliance regime in order to minimize tax base erosion due to inaccurate reporting. Specific areas of concern for governments include excessive or inflated expenditure claims and inaccurate resource valuation. The more developed Fiscal systems across the world do however offer a number of means of protection against these concerns.

9.2 Resource Valuation

- 9.2.1 The valuation of gas (or oil) is important in determining the level of deemed “gross proceeds,” on which royalties and other upfront taxes may directly apply before actual income levels are known. These values tend to be updated on a regular basis (typically monthly) and represent a flat or weighted average based on domestic and/or world resource prices, less some form of deduction for transportation costs.

9.3 Budget Process and Expenditure Authorisation

- 9.3.1 Under many systems the host government requires estimated budget summaries for approval prior to contract signature. Indonesian PSCs actually require annual budgets and work programs to be submitted in advance. This kind of reporting is more common and manageable under PSCs and RSAs, where there is a greater state involvement in the overall management of operations (often through a national company) than under Royalty/Tax systems. Such reporting, as well as general government involvement in management, is unpopular with contractors who argue that it effects operational efficiency and restricts flexibility.

9.4 Penalties for Non-compliance or Fraud

- 9.4.1 Governments guard against falsified or incomplete information with the threat of substantial penalties. Audits from taxation authorities and independent accountants serve as a useful tool for the government in all contracts. Where direct or indirect state management involvement exists, there is less of a concern for governments. Indirect monitoring through use of hydrocarbon industry “watchdogs” is common a modern phenomena.

9.5 Double Taxation Agreements

- 9.5.1 The OECD model treaty cedes taxation rights on natural resources to the country of origin and as such the existence of a standard double taxation agreement between two countries will not affect the potential tax take of the host country. Most double taxation agreements have standard terms, ensuring that the contractor will not be subject to tax for a second time on the same profits in its home jurisdiction.
- 9.5.2 The combination of host company domestic tax policy and double taxation agreements may make it preferential for contractor to trade either as a branch or a subsidiary of an overseas company. Many jurisdictions will seek to align the tax treatment of the two trading options so as to provide flexibility for foreign investors. In certain jurisdictions it is seen as preferable to encourage investment through resident corporate entities and in such circumstances penal branch taxes may be used.
- 9.5.3 Where a branch of an overseas foreign company distributes profits abroad, this is not strictly payment of a dividend and withholding tax may not therefore apply. Certain countries elect to treat these payments as dividends, whilst others may impose higher rates of income tax on branches of foreign companies than on foreign-controlled subsidiaries.

9.6 Renegotiation

- 9.6.1 Many contracts include clauses for renegotiation or updating over time. It should be noted that contractors are often keen to establish fixed rates of tax and cost recovery, so as to make financial forecasting and investment appraisal more reliable. Policies that do not distinguish between gas and oil are frequently drafted for oil and include renegotiation clauses in the case of gas discovery.



APPENDICES

FOR

INTERNATIONAL HYDROCARBONS FISCAL SYSTEMS BENCHMARKING REVIEW

Appendix 1 – Review of Fiscal System Types

A1.1 Royalty/Tax System

Royalty/tax systems are a form of “Concessionary” system, which are distinct from “Contractual” Systems (Risk Service Agreements and Production Sharing Contracts) in that ownership of the mineral resource passes to the contractor when it is produced (i.e. at the wellhead). Payment for this ownership then typically comprises a combination of royalties and taxes.

Royalties are taken directly from gross revenues and the point and means of resource valuation for “gross revenue” purposes is clearly important. With international markets for both gas and oil, it is commonplace to use market prices at the time of production to reflect the valuation on which the royalty should be based. This is arguably the most equitable means of valuation although some systems use a pre-determined resource price, which can expose the parties to economic risk due to price fluctuations.

In isolation a royalty leads to a regressive tax system. Royalties are typically taken as a flat percentage of gross revenues i.e. prior to recovery of costs by the contractor therefore the lower the profit of a particular contract, the greater the rate of royalty is as a % of that profit. Sliding scale royalties, along with other sliding scale tax rate calculations, are increasingly common. In the case of royalties, the sliding scale is typically based on the rate of daily production and this may increase in line with production.

There are two key problems of a regressive tax system within the realm of hydrocarbons. Firstly, due to the high risks involved in exploration a regressive system failing to account for these risks is unattractive to contractors. Secondly, governments are unable to secure additional revenues from those highly successful projects that provide “windfall profits” for contractors.

These deficiencies meant that through the 1970s and 1980s a trend towards more profit-based tax began. In terms of “core taxes” these layers are represented by income tax and surtaxes, the incidence of which occurs after deduction of royalties and cost recovery.

A simplified royalty/tax system would follow the following pattern:

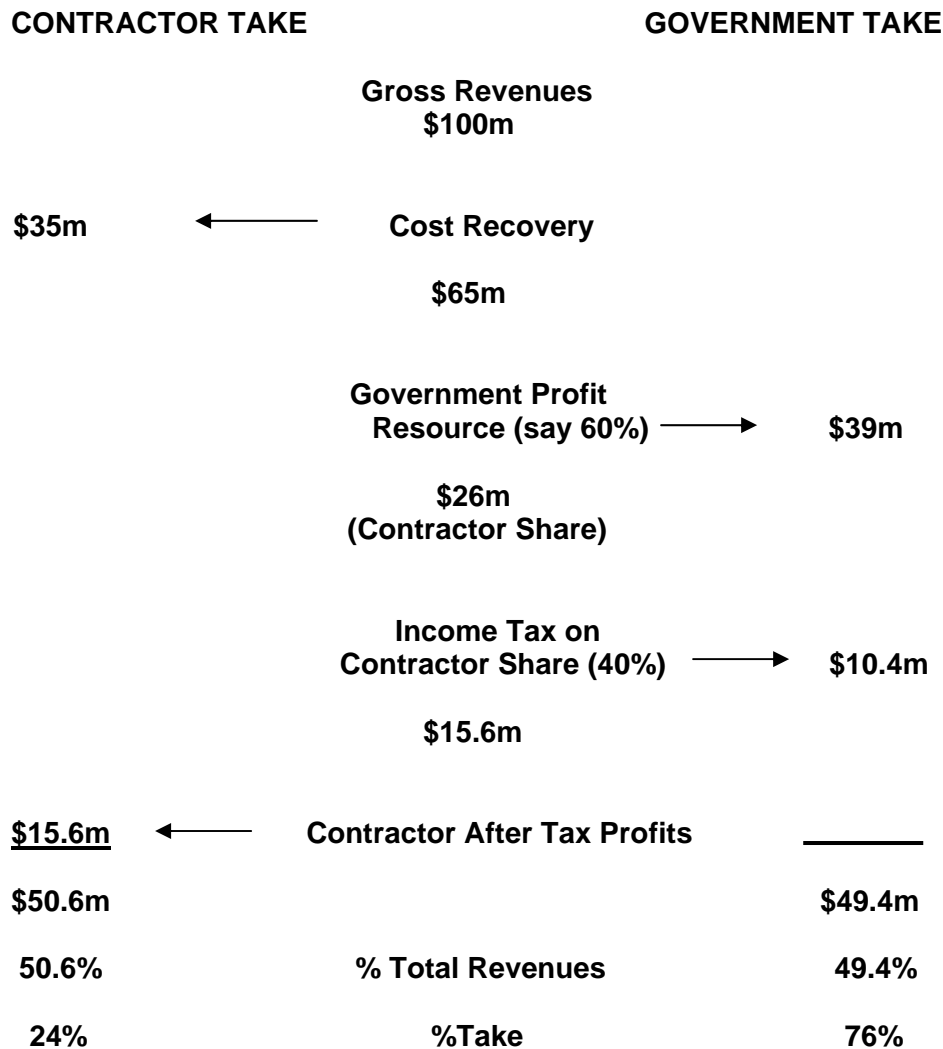
CONTRACTOR TAKE		GOVERNMENT TAKE
	Gross Revenues \$100m	
	Royalty – 20% →	\$20m
	\$80m	
\$35m ←	Cost Recovery	
	\$45m	
	Income Tax 25% + Surtax 10% →	\$15.75m
	\$29.25m	
<u>\$29.25m</u> ←	Contractor After Tax Profits	_____
\$64.25m		\$35.75m
64.25%	% Total Revenues	35.75%
45%	%Take	55%

Theoretically, there would be no government participation or profit resource split in the government's favour, as the contractor owns the resource at the point of production. In reality, the merging of the system types over time has led to the incorporation of tax layers historically found within contractual systems within royalty/tax arrangements. This may include an element of profit share or government participation in some systems.

A1.2 Production Sharing Contract

Production sharing contracts are the most common type of contractual system in the hydrocarbon sector. Under contractual systems the government retains ownership of minerals once they are extracted and contracting gas (or oil) companies then have a right to receive a share of the produced resource in accordance with the contract. The transfer of title to this resource is effectively delayed to the point of export in contrast to royalty/tax systems where it passes on production.

Most PSC regimes do not include a royalty, as this goes against the main objective of creating a predominantly progressive system. The contractor's share of produced resource is typically subject to income tax (and potentially surtaxes), which are levied after cost recovery as under the royalty/tax system. A simplified PSC would follow the following pattern:



The first ever PSC was introduced by Indonesia in 1966, and this follows the above simplified taxation mechanism. This very first contract also provides a good understanding of how a PSC functions:

<u>Government</u>	<u>Contractor</u>
<ul style="list-style-type: none"> • Retains title to hydrocarbons 	<ul style="list-style-type: none"> • Responsible for exploration, development and production operations in accordance with contract.
<ul style="list-style-type: none"> • Retention of management and control of all operations through National Oil Company (Permina). 	<ul style="list-style-type: none"> • Provision of all financing and technology and bearing of all risks associated with project
<ul style="list-style-type: none"> • All equipment purchased and imported to Indonesia became property of Permina. 	<ul style="list-style-type: none"> • Cost recovery limits restricted to a percentage of production
<ul style="list-style-type: none"> • Remunerated through 65% Production Split 	<ul style="list-style-type: none"> • Remunerated through 35% Production Split (then subject to income tax)

Whilst there is great variation in PSCs across the world, both in the way in which core taxes are calculated and in the range of additional taxes that apply, the key elements of state ownership and remuneration by production remain.

A1.3 Risk Service Agreement

Like PSCs, Risk Service Agreements (RSAs) are contractual based systems where the government retains ownership of the natural resource produced by the contractor.

The main difference with RSAs is that the contractor is not remunerated for his services provided under the contract by means of natural resource. Instead, the contractor is rewarded financially, in cash, for exploration and production efforts. Usually this is by way of a “service fee” with the contractor receiving a percentage of profits, rather than production.

In a number of RSAs, the contractor is able to use its share of profits to purchase an element of the natural resource at a discount. In these cases the only effective difference between an PSC and an RSA is the timing of the ownership. On a simple level, it is the nature of initial contractor payment that provides a distinction between the two. A simplified RSA would follow the pattern outlined below:

CONTRACTOR TAKE		GOVERNMENT TAKE	
		Gross Revenues \$100m	
\$7.5m	←	Contractor Service Fee (7.5%)	
\$35m	←	Cost Recovery	
		Revenues available for Sharing \$57.5m	
		Government Profit Resource (60%)	→ \$34.5m
		\$23m (Contractor Share)	
		Income Tax on Contractor Share (40% of Service Fee + Contractor share)	→ \$12.2m
		\$10.8m	
<u>\$10.8m</u>	←	Contractor After Tax Profits	_____
\$53.3m			\$46.7m
53.3%		% Total Revenues	46.7%
28%		%Take	72%

The above example uses a flat percentage to calculate both the “service fee” and the income tax on the contractor's total income. Some fiscal systems calculate these rates using “sliding scales,” which are correlated to profitability. This is another way of seeking additional revenue from those ventures demonstrating higher profit levels.

The various sliding scales used in calculating service fees are common with those used in surtax and royalty rate calculations. These are analysed in sections 6 and 7 of the report.

Appendix 2 – Overview of G1 Fiscal Systems

System	Type^	Take (%)	Royalty (%)	Income Tax (%)	Surtax (%)	Government Split* (%)	Cost Recovery Limits (%)	Ring-fencing? (Y/N)	Sliding scale Used?
Argentina 1990 Royalty Tax	RT	49.6	13.8	36	-	-	100	N	Royalty
Australia Federal Royalty Tax	RT	56.9	-	36	40	-	100	N	No
Australia Western Royalty Tax	RT	54	9.5	36	10	-	100	N	Surtax
Bolivia 1980s Service contracts	RT	68.6	31	40	-	-	100	N	No
Bolivia 1996 Shared Risk Contracts	RT	58.2	28.7	25	-	-	100	N	No
Bolivia 1997 Risk Service	RT	54.9	18	25	16.7	-	100	N	No
Brazil 1994 Service Agreement	RSA	75	-	25	10	100	100	Y	Gvt. Split
Brazil 1999 ANP Round 1	RT	60.2	11	27	25	-	100	Y	Surtax
Colombia 1980s Risk Association	RSA	79.2	20	40	-	50	100	Y	No
Colombia Pre 1994 Association Contract	RSA	81.8	20	30	25	50	100	Y	Gvt. Split
Colombia Pre 1994 Risk Service	RSA	84.9	20	37.5	-	65	100	Y	No
Colombia Post 1994 Association	RSA	83.1	20	35	-	62.5	100	Y	Gvt. Split
Colombia 1998 TIBU Incremental Production	RSA	72.1	20	35	-	38	100	Y	Gvt. Split
Colombia 2000 Contract Adjustments	RSA	68.7	7	35	-	46	100	Y	Royalty & Gvt. Split
Indonesia Pre 1984 Standard PSC	PSC	67.2	-	45	-	40.3	100	Y	No
Indonesia Post 1989 Third Generation	RSC	71.8	-	35	-	56.8	80	Y	No
Indonesia 1990 Fifi-Zaitun	PSC	71.9	-	35	-	56.8	80	Y	No
Indonesia 1994 Frontier Terms	PSC	62.5	-	35	-	42.3	85	Y	No
Indonesia Post 1996 Standard PSC	PSC	67.2	-	30	-	53.2	85	Y	No
Indonesia 1998 East Frontier Terms	PSC	63.6	-	30	-	48	85	Y	No
Peru Risk Service agreement Oxy	RSA	73.5	-	35.5	-	42	100	N	No
Peru 1989-92 Risk Service	RSA	71.3	-	35.5	-	39	100	N	Gvt. Split
Peru 1994 License Contracts	RT	62.8	35.5	35.5	-	-	100	N	Royalty

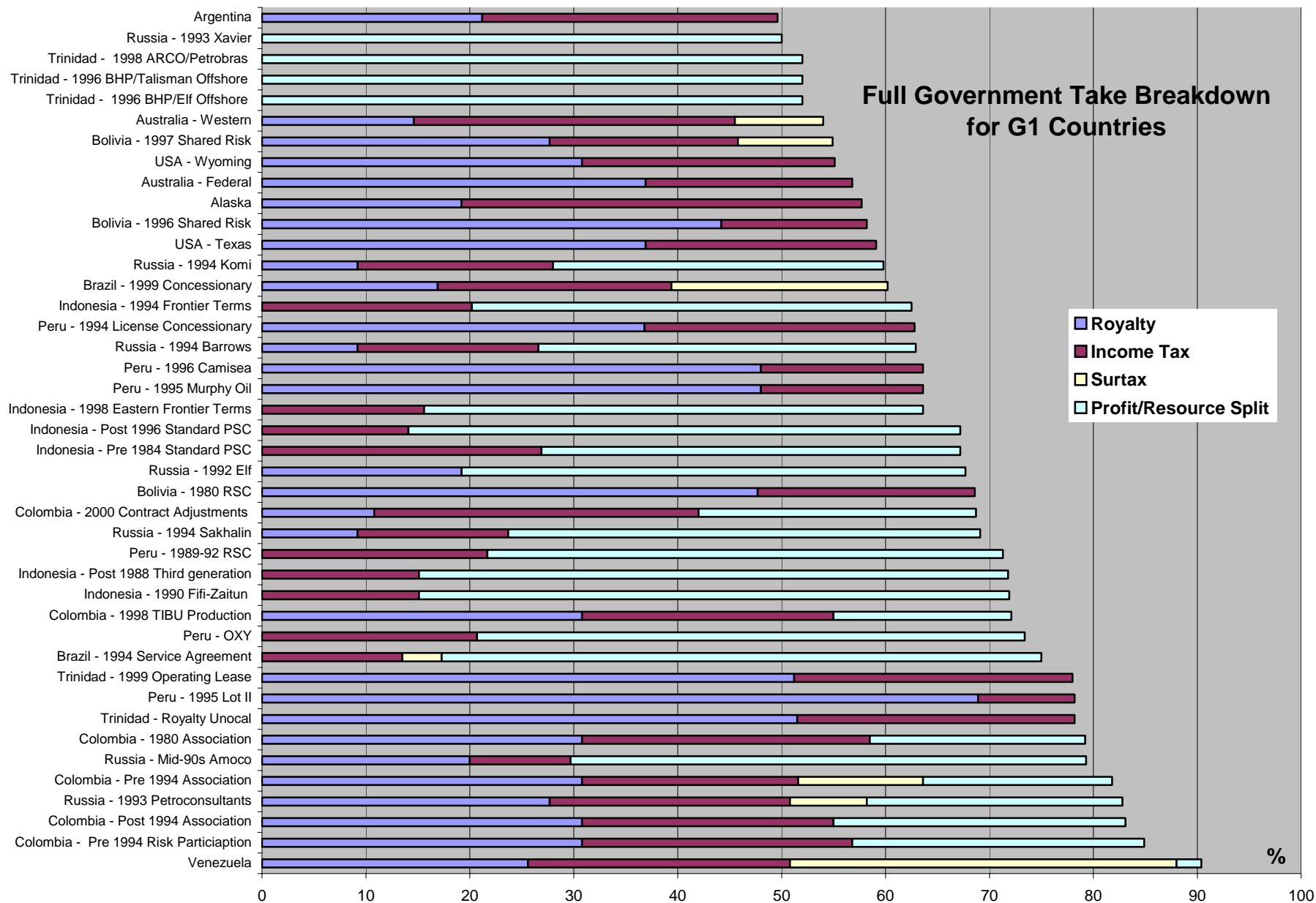
System	Type^	Take (%)	Royalty (%)	Income Tax (%)	Surtax (%)	Government Split* (%)	Cost Recovery Limits (%)	Ring-fencing? (Y/N)	Sliding scale?
Peru 1995 Lot II License Contract	RT	78.2	59	30	-	-	100	N	Royalty
Peru 1995 Murphy Oil Contract	RT	63.6	37.5	30	-	-	100	N	Royalty
Peru 1996 Camisea	RT	63.6	37.5	30	-	-	100	N	Royalty
Russia 1992 Elf Interneft PSC	PSC	67.7	12.5	-	-	60	100	Y	Royalty & Gvt. Split
Russia 1993 Petroconsultants	PSC	82.8	18	32	30	50	100	Y	Gvt. Split
Russia 1993 Xavier Mines Tech Service	PSC	-	-	-	-	50	60	Y	No
Russia 1994 Astrhan Oblast PSC	PSC	62.9	6	32	-	40	100	Y	Royalty & Gvt. Split
Russia 1994 Komi Republic	PSC	59.8	6	32	-	35	75	Y	Gvt. Split
Russia 1994 Sakhalin II	PSC	69.1	6	32	-	50	100	Y	Gvt. Split
Russia Mid 1990s Amoco Priobskoe	PSC	79.3	13	32	-	62	100	Y	No
Trinidad & Tobago 1993 Unocal	RT	78.2	33.4	55	-	-	100	Y	Royalty
Trinidad & Tobago 1996 BHP/Elf	PSC	52	-	-	-	52	35	Y	Gvt. Split
Trinidad & Tobago 1996 BHP/Talisman	PSC	52	-	-	-	52	50	Y	Gvt. Split
Trinidad & Tobago 1998 ARCO/Petrobras/Union Texas	PSC	52	-	-	-	52	55	Y	Gvt. Split
Trinidad & Tobago 1999 Example Operating Lease	RT	78	33.2	-	-	55	100	Y	Royalty
United States Alaska	RT	57.7	12.5	47.5	-	-	100	N	No
United States Texas	RT	59.1	24	35.1	-	-	100	N	No
United States Wyoming	RT	55.1	20	35.1	-	-	100	N	No
Venezuela	RSA	90.4	16.7	67.7	16.7	20	100	Y	Surtax & Gvt. Split

^ PSC - Production Sharing Contract

RSA - Risk Sharing Agreement

RT – Royalty Tax System

* Government Split includes Government resource share (PSC), profit share (RSA), and government participation



Appendix 3 – Analysis of Individual Systems

Included in Appendix 3 is a summary of all the systems reviewed in this report.

All summaries include:

- 1) Basic details of the system, including government take and system type
- 2) Graphical representation showing the break down of government take
- 3) Flow diagram showing the incremental stages of core taxation

Argentina – 1990+ Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 49.6%

Core Taxes Used: 1) Royalty – 13.8% effective rate
2) Corporate Income Taxes– 36%

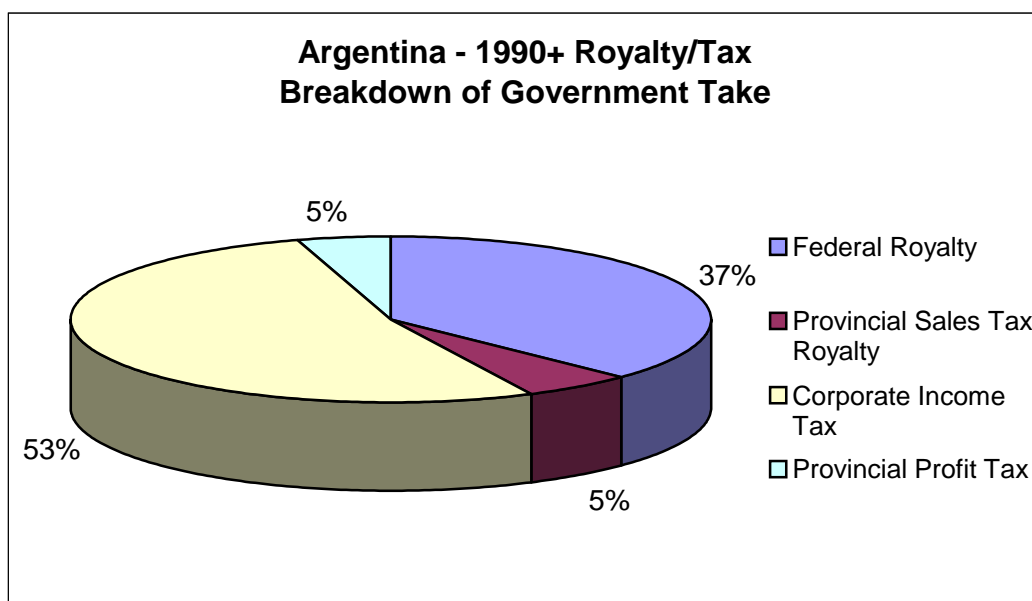
- 1) Argentina has two royalties a Federal Royalty (12.00% - of which there is a net back allowed 0-4% of gross sales price) calculated on gross revenues, and a secondary Provincial Sales Tax Royalty (from 1-3% based on gross revenues less Federal Royalty)
- 2) Corporate income taxes comprise of Profit Income Tax (33%), and Provincial Profit Tax (3%), which are both calculated on net income after deduction of costs and royalties.

Other Taxes:: Rentals 419 Pesos/km²/year for the first 4 years increasing to 838 Pesos/km²/year thereafter.

Royalty on marginal fields 5%

Domestic Market Obligations are included in the agreement

Cost Accounting: Depreciation calculated on Units of Production
No Ring-fencing of costs.

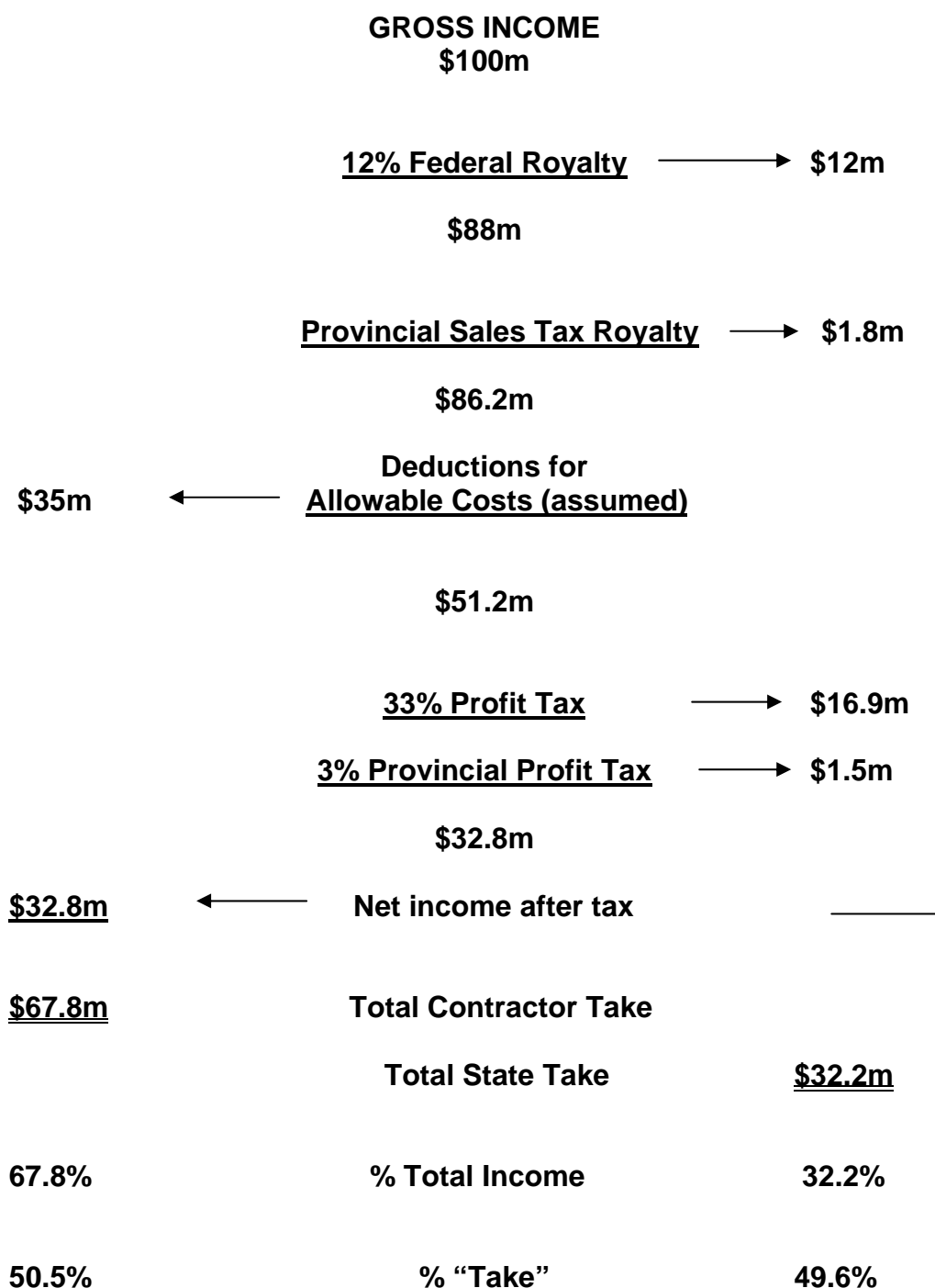


FLOW DIAGRAM FOR ARGENTINA
1990+ ROYALTY/TAX

Based on Gross Income of \$100m

Contractor Share

State Take



Australia – Federal Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 56.9%

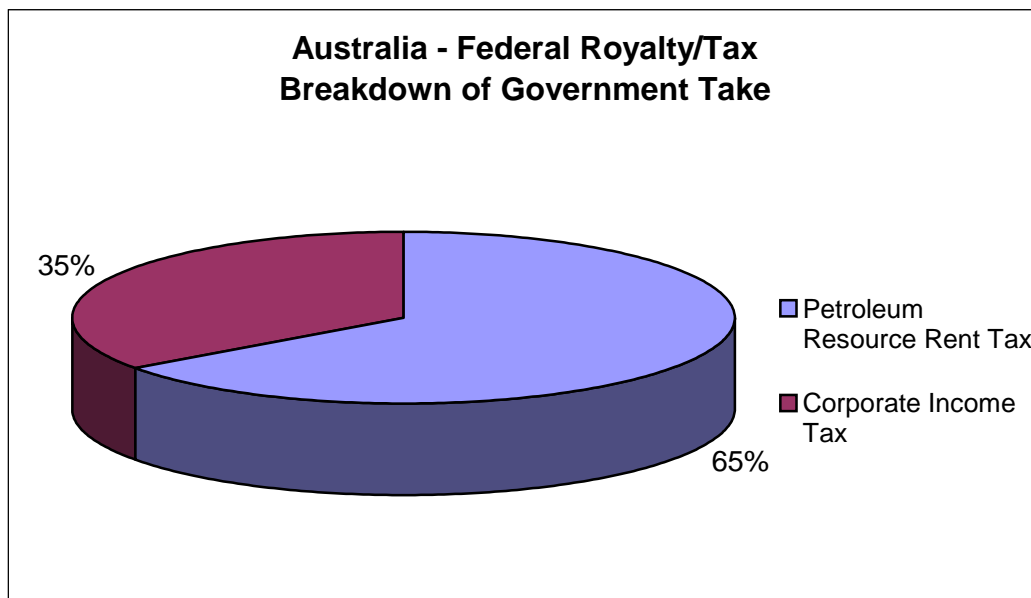
Core Taxes Used: 1) Surtax – 40%
2) Corporate Income Tax – 36%

- 1) Petroleum Resource Rent Tax (PRRT) is a project based surtax calculated on the gross revenue less costs. PRRT calculation also includes a 15% uplift for exploration and a 5% uplift for development. PRRT is levied before Corporate income tax and is deductible against it.
- 2) Corporate income tax is levied at a rate of 36% on net income after deduction of costs and royalties.

Other Taxes:: Withholding Tax of 15% on dividends.

Cost Accounting: Development costs depreciated using a straight line method over 8 years. Depreciation on facilities is calculated using a 20% reducing balance method.

Ring-fencing of costs applies by contract; offshore exploration cost are deductible from PRRT company-wide

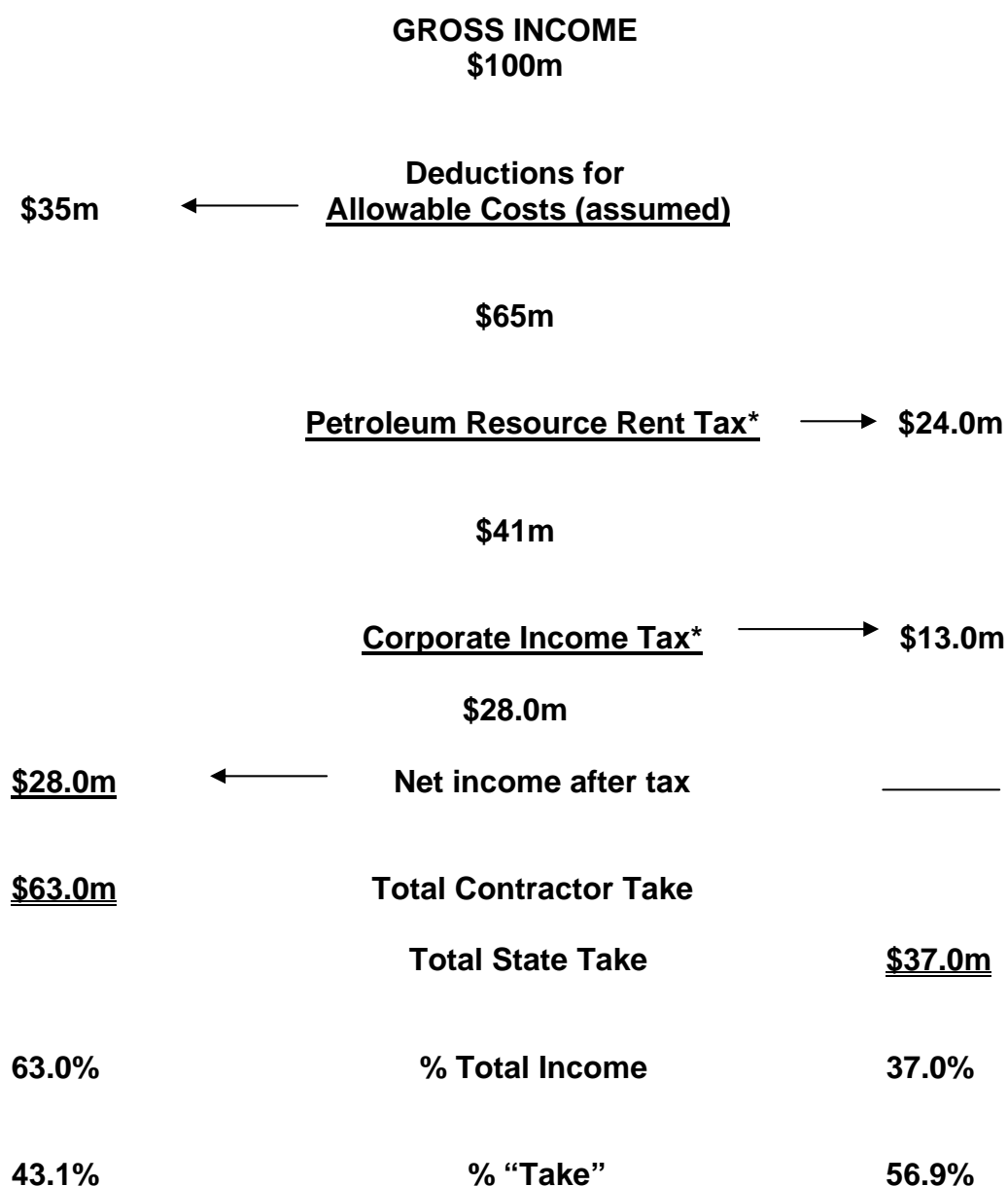


FLOW DIAGRAM FOR AUSTRALIA **(FEDERAL) ROYALTY/TAX**

Based on Gross Income of \$100m

Contractor Share

State Take



**PRRT and Income Tax calculations include a 15% cost uplift*

Australia – Western Australia Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 54%

Core Taxes Used:

- 1) Royalty – 9.5% effective rate
- 2) Corporate Income Tax – 36%
- 3) Surtax – 10%

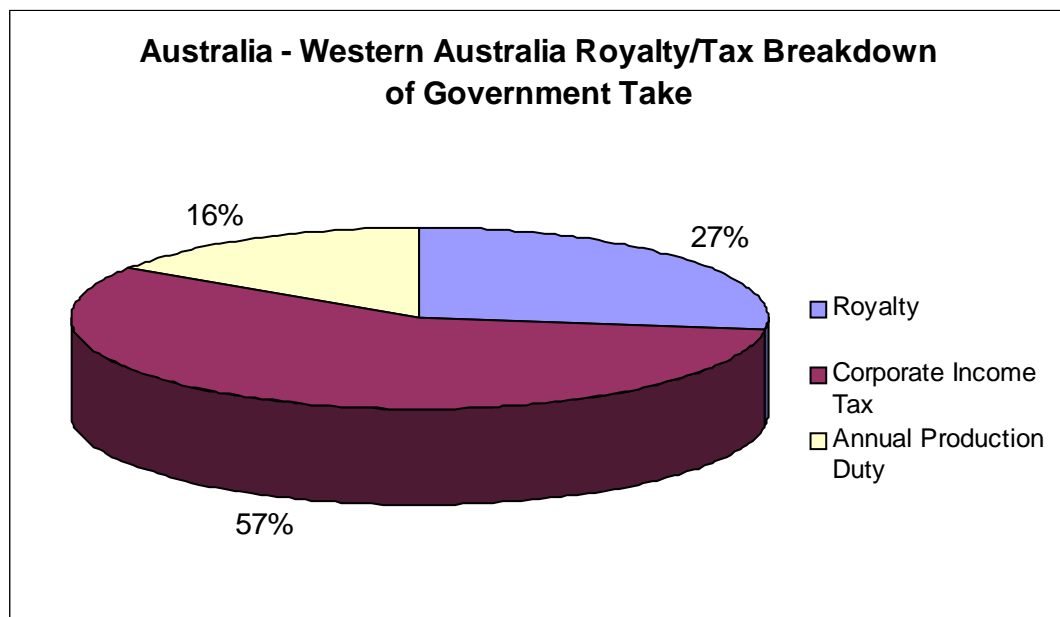
- 1) A royalty of 10% is levied on the wellhead value calculated by deducting certain platform and transportation costs.
- 2) Corporate income tax is levied at a rate of 36% on net income after deduction of costs and royalties.
- 3) Surtax (Annual Production Tax) is a sliding-scale additional profits tax calculated on annual production. Scale ranges between 0-35%.

Other Taxes: Rentals \$50/block/year

Withholding Tax of 15% on dividends.

Cost Accounting: Assets are depreciated using a straight line method over 8 years.

No Ring-fencing of costs applies.



FLOW DIAGRAM FOR AUSTRALIA
(WA) ROYALTY/TAX

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10% Royalty less
Annual Production Tax → **\$9.5m**

\$90.5m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$55.5m

36% Corporate Tax → **\$20.0m**

10% Annual Production Tax → **\$5.6m**

\$29.9m

\$29.9m ← **Net income after tax**

\$64.9m **Total Contractor Take**

Total State Take **\$35.1m**

64.9%

% Total Income

35.1%

46%

% "Take"

54%

Bolivia – Service contracts 1980s

Contract Type: Royalty Tax System

% Government Take: 68.6%

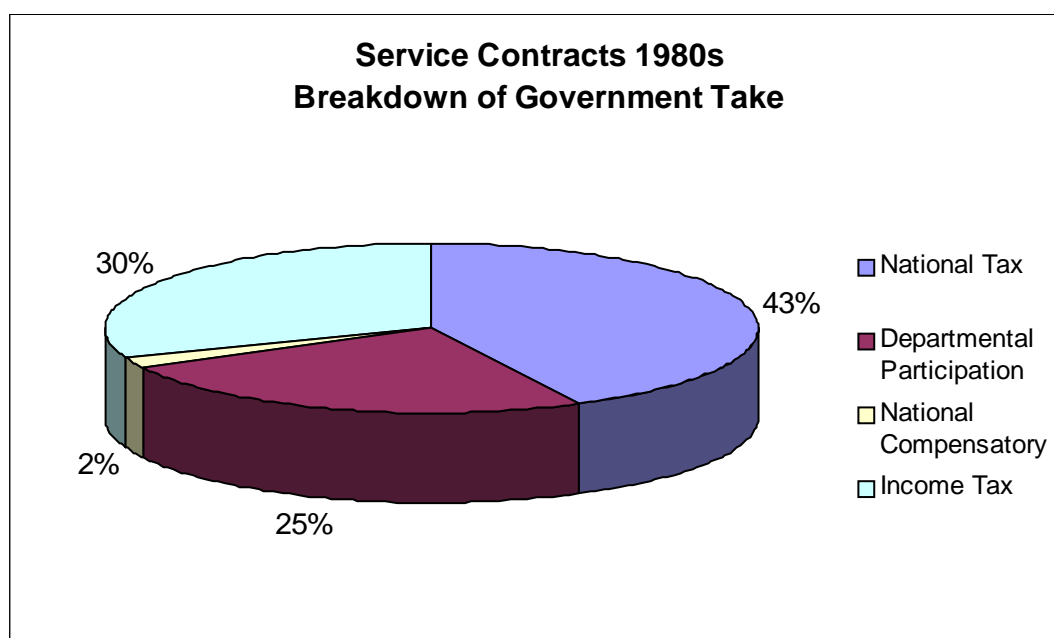
Core Taxes Used: 1) Royalty – 31%
2) Corporate Income Tax– 40%

- 1) Royalties are calculated on gross revenues at 31%. These are made up of a 19% national tax based on production, a 11% departmental participation royalty and a 1% national compensatory royalty.
- 2) Corporate income tax of 40% is calculated on net income after deduction of costs and royalties.

Other Taxes: None

Cost Accounting: Development costs are depreciated on a straight line basis over 5 years and development costs over 8 years. Exploration costs are expensed

Ring-fencing of costs are contract dependent



FLOW DIAGRAM FOR BOLIVIA
SERVICE CONTRACTS 1980s

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

19% National Tax Royalty —————> **\$19m**

**11% Departmental
Participation Royalty** —————> **\$11m**

**1% National
Compensatory Royalty** —————> **\$1m**

\$69m

\$35m ←———— **Deductions for
Allowable Costs (assumed)**

\$34m

40% Profit Tax —————> **\$13.6m**

\$20.4m

\$20.4 ←———— **Net income after tax** —————

\$55.4 **Total Contractor Take**

Total State Take **\$44.6m**

55.4% **% Total Income** **44.6%**

31.4% **% "Take"** **68.6%**

Bolivia – 1997 Risk Service Contracts E&P Round

Contract Type: Royalty Tax System

% Government Take: 54.9%

Core Taxes Used:

- 1) Royalty – 18%
- 2) Corporate Income Tax– 25%
- 3) Surtax – 16.7% effective rate

- 1) Royalties are calculated on gross revenues at 18%.
- 2) Corporate income tax of 25% is calculated on net income after deduction of costs and royalties.
- 3) Surtax charged at a rate of 25% on profits before income tax (less special costs uplifts). Here the cost uplifts are taken to reduce the profit figure by 50%.

Other Taxes: Rentals \$0.23 per hectare for the first 3 years

Remittance Tax 12.5%

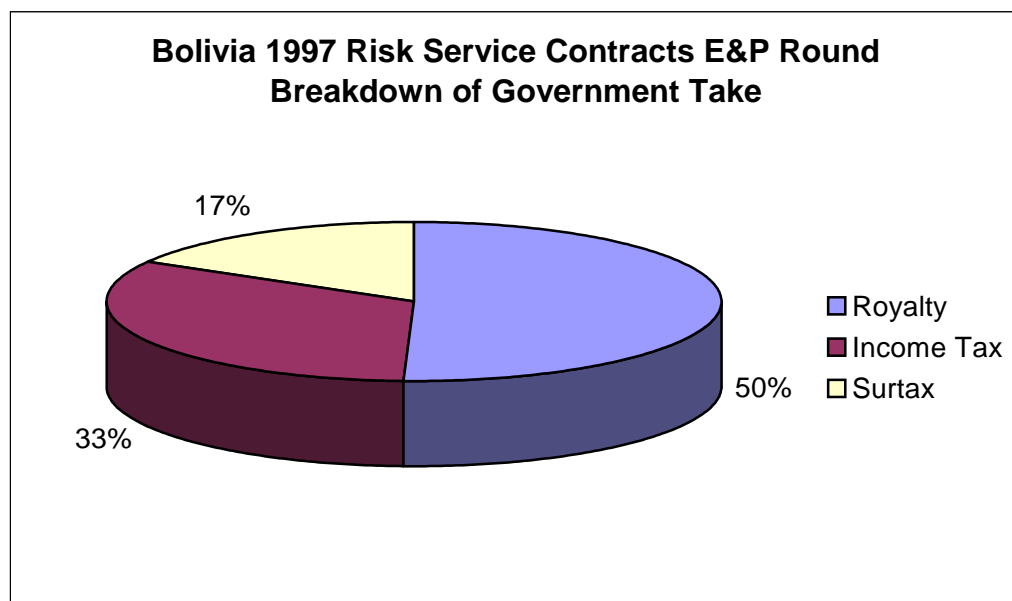
Import duties 5%

Transfer tax 16%

Domestic market obligations possible

Cost Accounting: Development costs are depreciated on a straight line basis over 5 years and development costs over 8 years. Exploration costs are expensed

Ring-fencing of costs are contract dependent

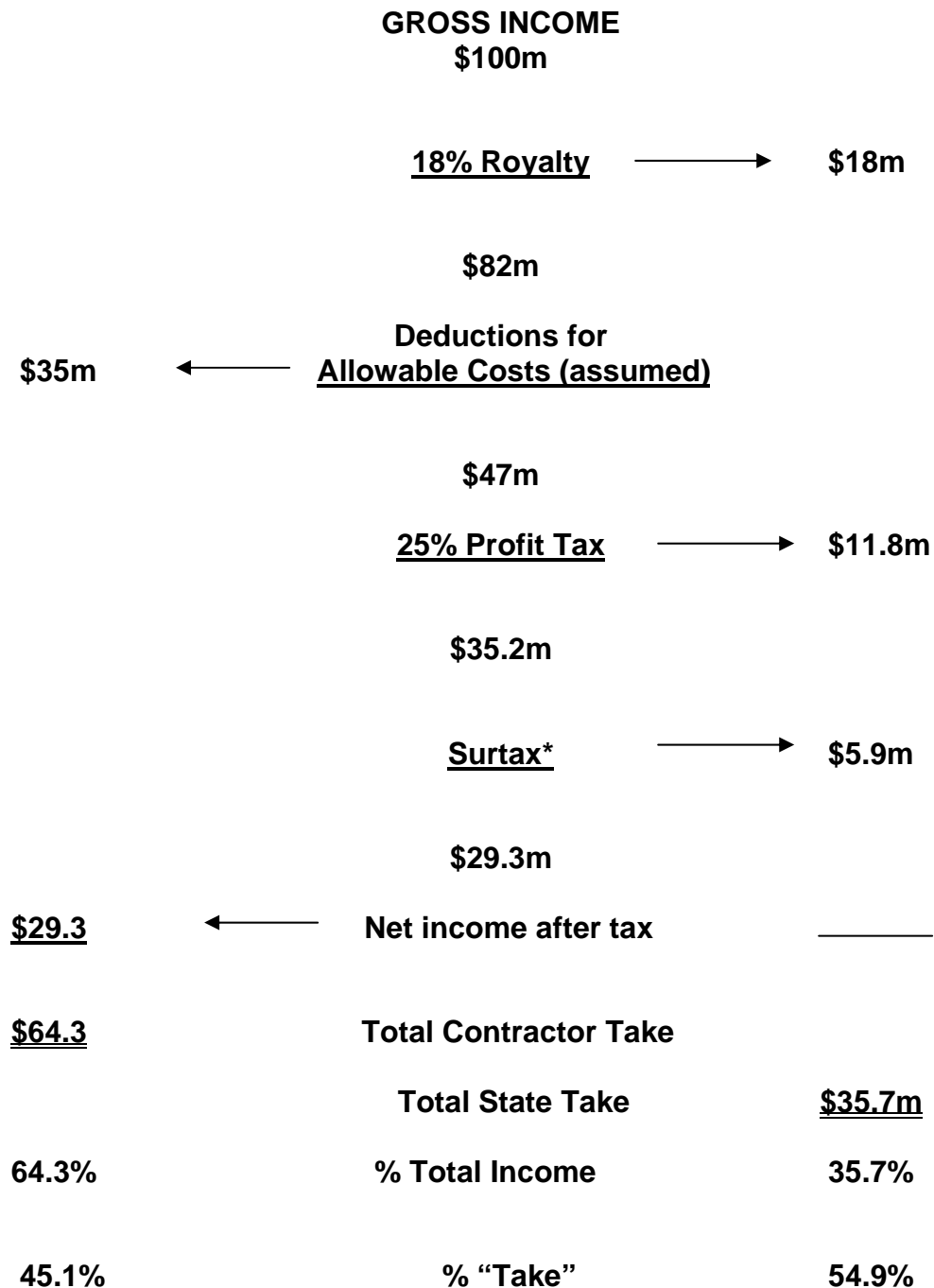


**FLOW DIAGRAM FOR BOLIVIA
RISK SHARING CONTRACT 1997**

Based on Gross Income of \$100m

Contractor Share

State Take



** = Surtax charged at a rate of 25% on profits after profit tax, with a 33% annual uplift granted for operational expenditure.*

Bolivia – 1996 Shared Risk Contracts

Contract Type: Royalty Tax System

% Government Take: 58.2%

Core Taxes Used: 1) Royalty – 28.7% effective rate
2) Corporate Income Tax– 25%

- 1) The effective royalty rate comprises of the 6% YPFB participation of gross production, the 11% departmental royalty and the 1% national compensatory royalty. These three royalties are calculated on gross revenues. In addition there is a 13% royalty which applies to existing hydrocarbons (transportation net back is allowed when determining this contribution)
- 2) Corporate income tax of 25% is calculated on net income after deduction of costs and royalties.

Other Taxes: Rentals approximately \$0.5 hectare for the first 3 years
Remittance tax on profit abroad 12.5%

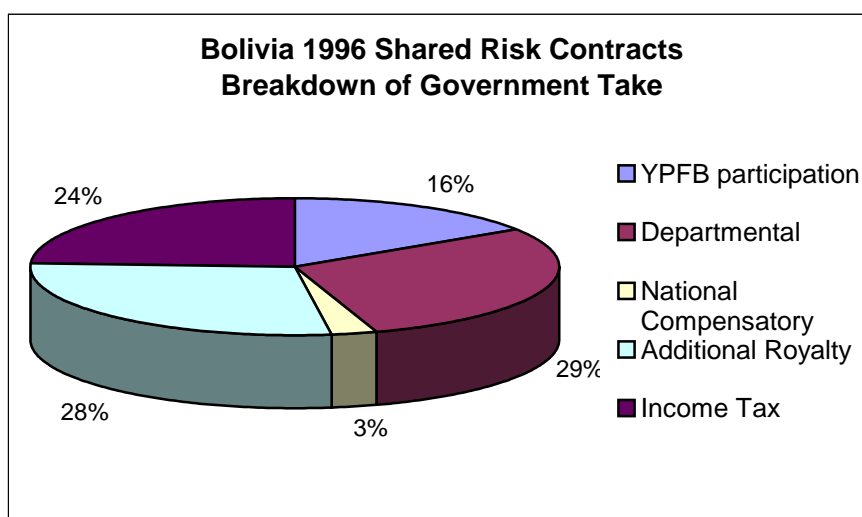
Vat on the purchase and sale of non real estate goods 13%
Transaction tax on commercial transactions 3%

The tax system is complex with some of these taxes being mutually creditable against each other and dependent on classification of “old” or “existing” fields or whether or not the contracts were entered into before the law.

Import duties 5%
Possible domestic market obligation

Cost Accounting: Development costs are depreciated on a straight line basis over 5 years and development costs over 8 years. Exploration costs are expensed

Ring-fencing of costs are contract dependent

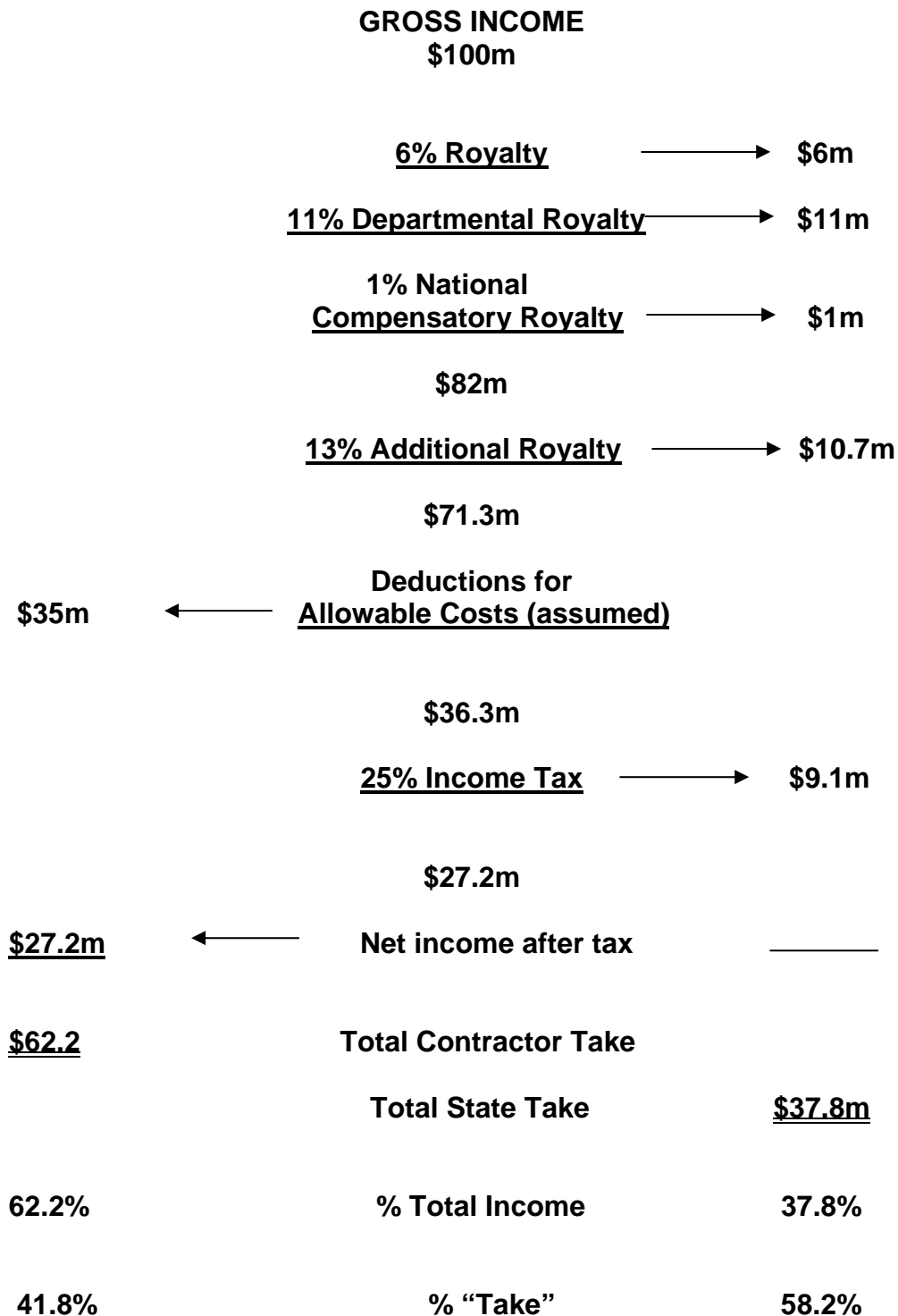


FLOW DIAGRAM FOR BOLIVIA
SHARED RISK CONTRACT 1996

Based on Gross Income of \$100m

Contractor Share

State Take



Brazil – 1994 Service Agreement

Contract Type: Risk Service Agreement

% Government Take: 75%

Core Taxes Used:

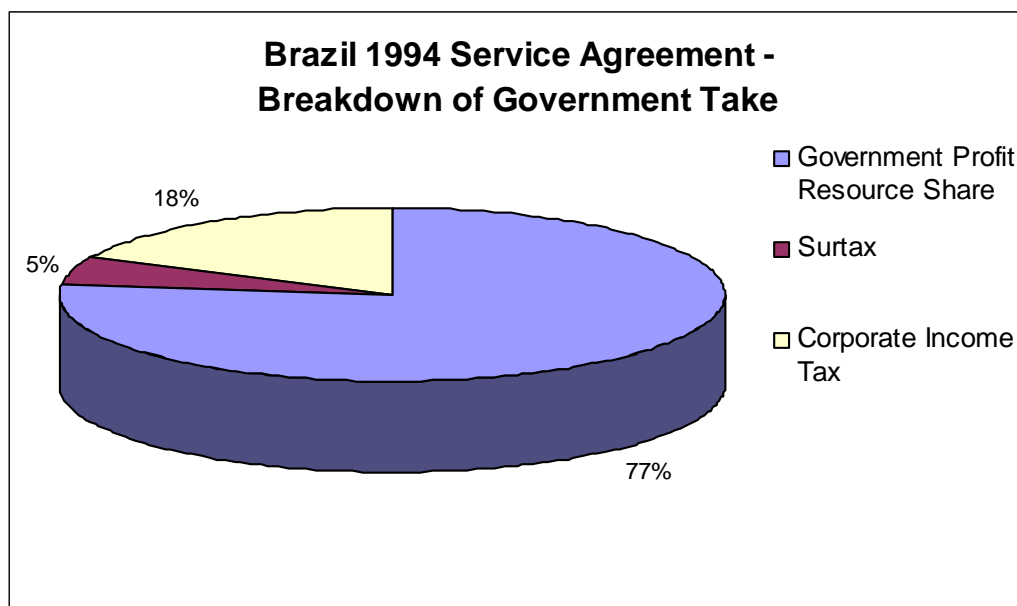
- 1) Service Fee (25% - paid to contractor)
- 2) Corporate Income Tax – 25%
- 3) Surcharge – 10%
- 4) Government Profit Gas share – 100%.

- 1) After allowing for cost recovery, government pays a Service fee to the contractor, based on a % of net revenues. The level of the service fee is based on a complex calculation, which factors in production levels under a particular contract and the internal market price for the resource (i.e. the price at which Brazil imports gas or crude oil at that time). 25% is the figure used here. Alternatively, Contractor could purchase between 0-40% of resource with service fee and cost recovery proceeds.
- 2) Corporate income tax is levied at a rate of 25% on the level of the Service Fee paid to the contractor.
- 3) 10% corporate income tax surcharge, taking effective rate of income tax on Service Fee to 35%.
- 4) Government retains ownership of the remainder of all profit gas, having taken control of operations, and paying costs, when production commenced.

Other Taxes: Signature Bonuses – negotiable and not recoverable as costs.

Dividend Remittance Tax – 25%.

Cost Accounting: Capital costs depreciated on a minimum 5-year basis. Exploration costs and/or interest can only be recovered if project is commercial (based on gross proceeds as % costs).

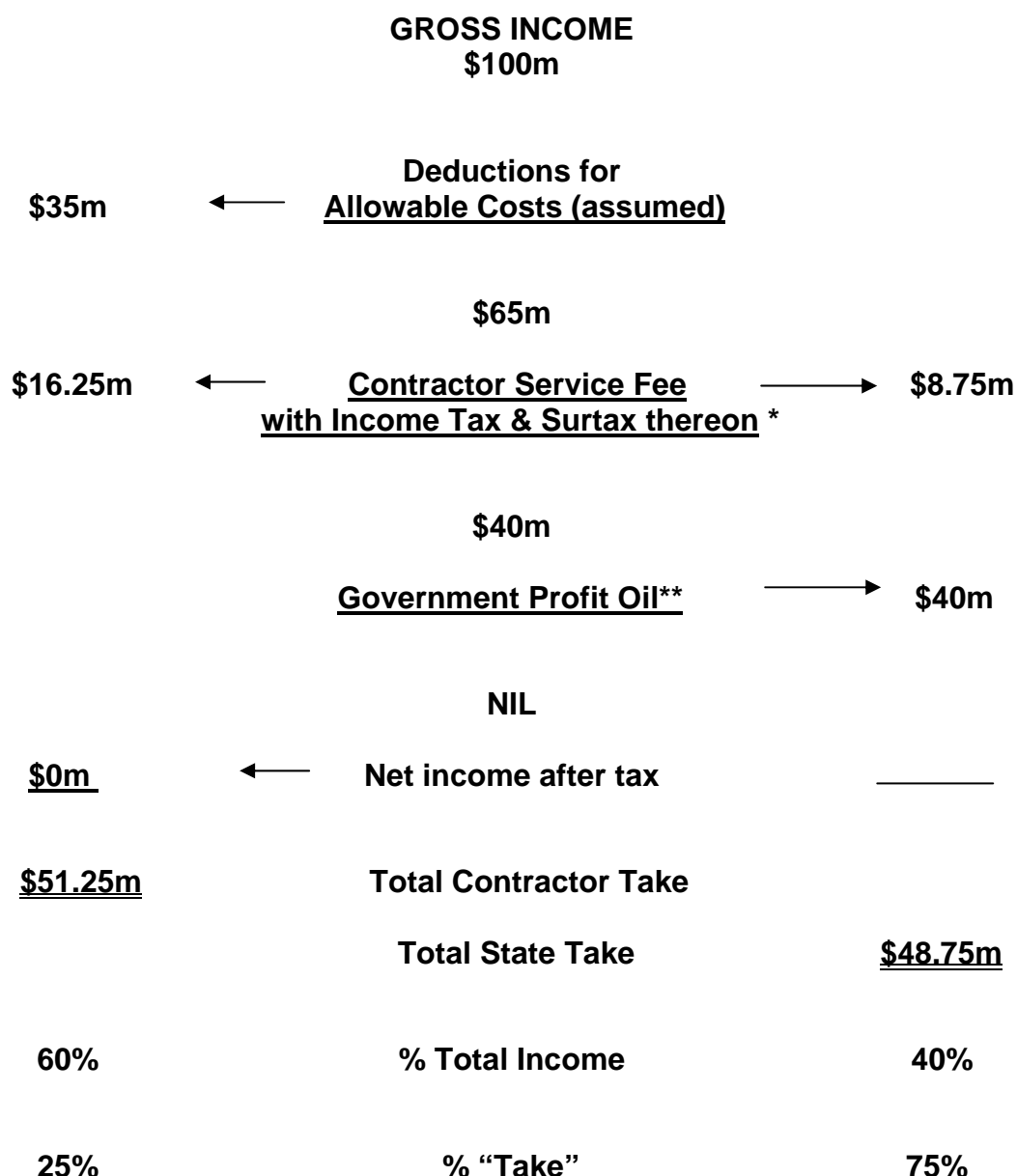


FLOW DIAGRAM FOR BRAZIL
1994 – SERVICE AGREEMENT

Based on Gross Income of \$100m

Contractor Share

State Take



* = Complex service fee system based on an internal market price for crude oil (price which Brazil pays to import its deficit oil from abroad). Around 25% (figure used here) less 35% tax (comprising 25% income tax and 10% surtax).

** = Petrobras (State Oil Company) takes control of operations once commercial production commences. Contractor's remuneration consists of service fee and cost recovery after this point.

Brazil – 1999 ANP Round 1 Concessionary

Contract Type: Royalty Tax System

% Government Take: 60.2%

Core Taxes Used:

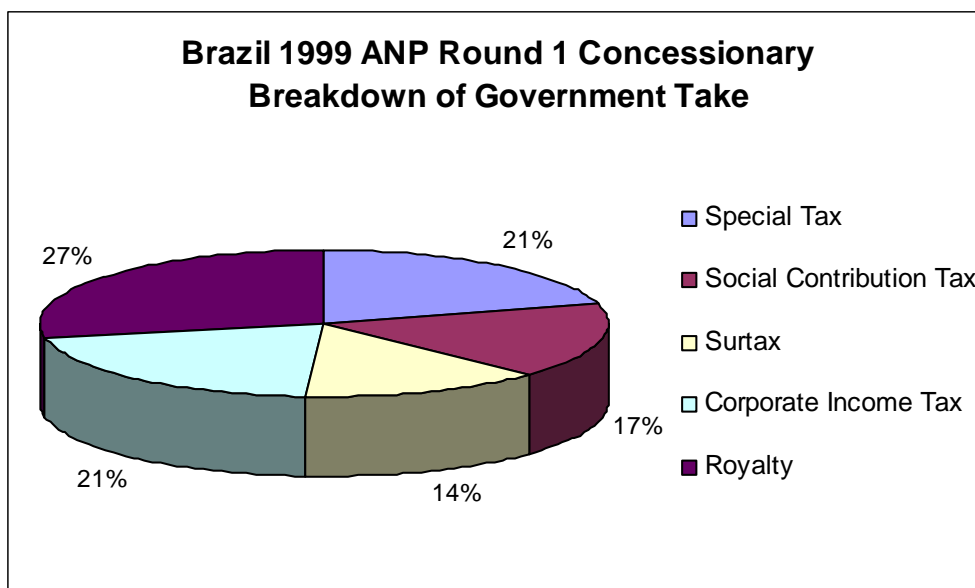
- 1) Royalty – 11%
- 2) Corporate Income Taxes – 27%
- 3) Surtaxes – 25%

- 1) Royalty of 11% taken from gross revenues. Comprises 10% general royalty and 1% onshore royalty. Offshore projects therefore offer 10% royalty rate and rate can be reduced to as little as 5% for high-risk onshore areas.
- 2) Corporate income tax is levied at a rate of 15% profits remaining after deduction of royalty and cost recovery. Additional “Social Contribution Tax” of 12% also collected at this stage.
- 3) Regular surtax of 10% collected with income tax, together with Additional Profits type tax, calculated on a sliding scale between 0-15% using production levels. Total used is 25%.

Other Taxes: Signature Bonuses – biddable

Dividend Remittance Tax – 25%.
VAT Municipal (2-5% depending on state)
VAT State (17-18%) – called “Sales Tax”
VAT Federal (5-20%) – called “Sales Tax”
Transfer Tax – 0.38%
Payroll Taxes (typically add 50-95% to wage costs, with labour laws requiring two thirds national workforce).
Domestic Market Obligations on a pro-rata basis

Cost Accounting: Capital costs depreciated on various scales.

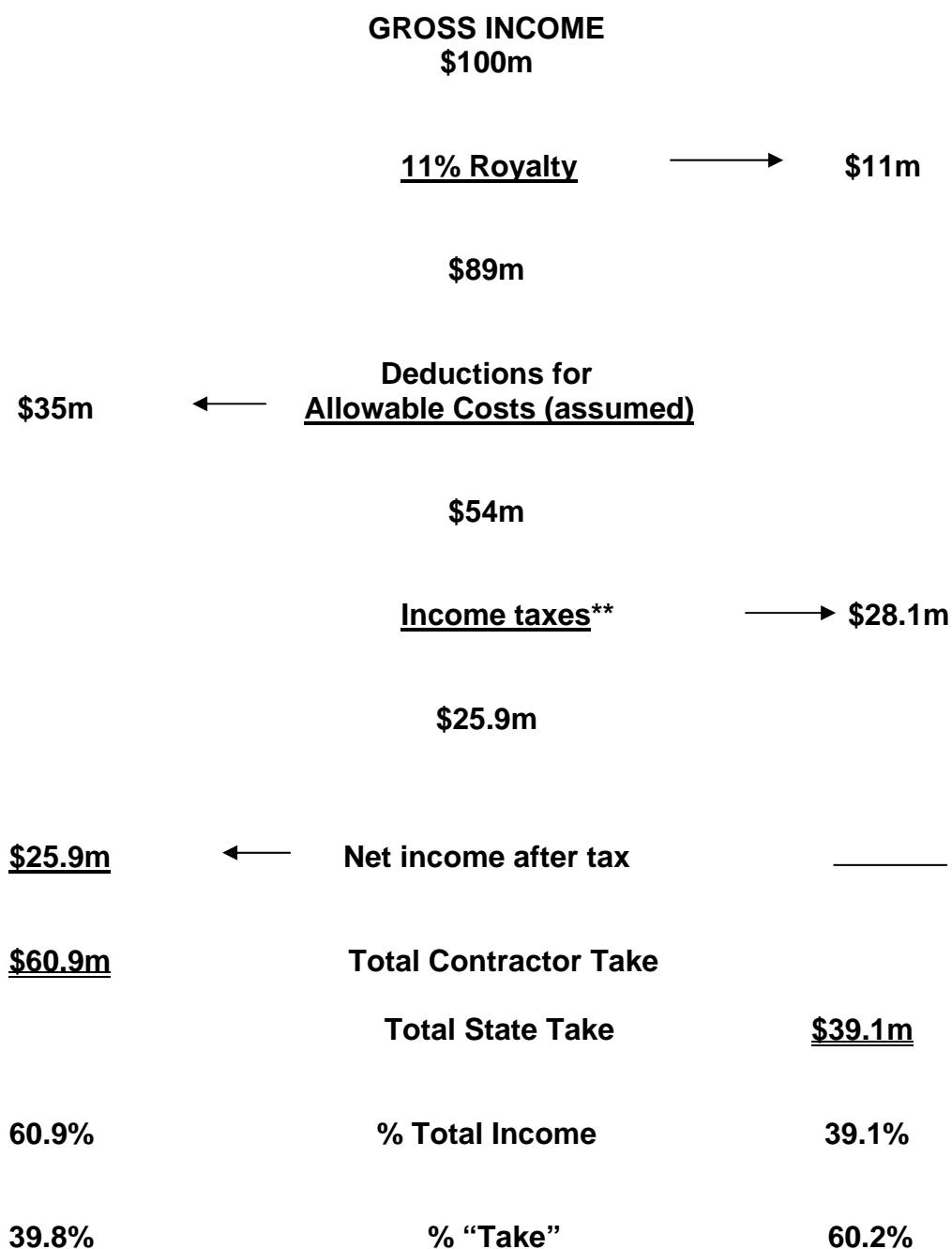


FLOW DIAGRAM FOR BRAZIL
1999 – ANP ROUND 1 CONCESSIONARY

Based on Gross Income of \$100m

Contractor Share

State Take



** = Tax comprises 15% basic income tax, 10% surtax, further excess profits tax of 15% (maximum on sliding scale) and 12% Social Contribution tax.*

Colombia– Early 1980s Risk Association Contract

Contract Type: Risk Service Agreement

% Government Take: 79.2%

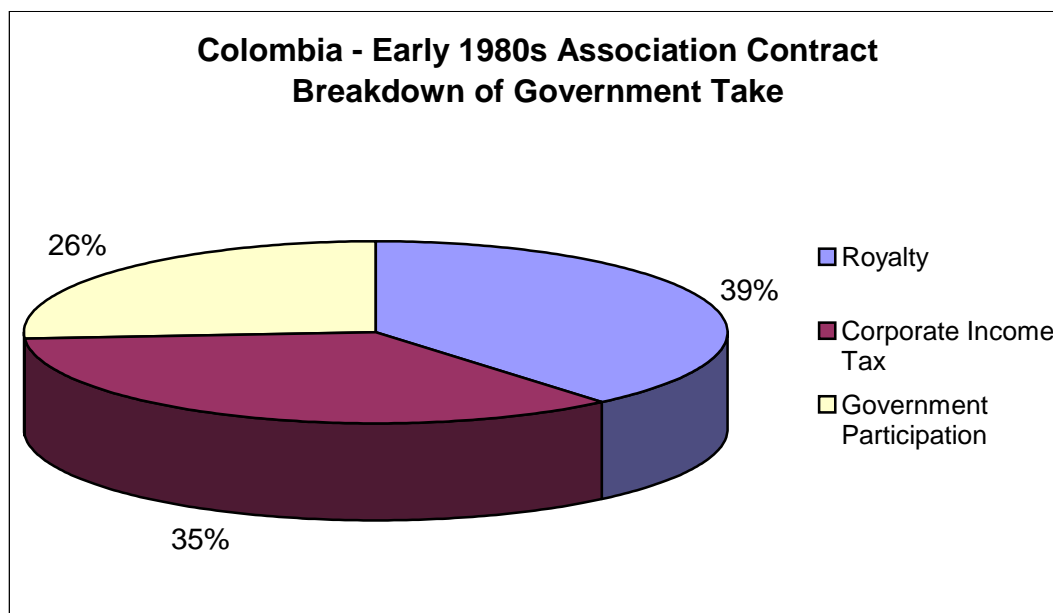
Core Taxes Used:

- 1) Royalty – 20%
- 2) Government Participation – 50%
- 3) Corporate Income Tax – 40%

- 1) Royalty (20%) is calculated on gross revenues
- 2) Government Participation at 50%.
- 3) Corporate income tax is levied at a rate of 40% on net income after deduction of costs and royalties.

Other Taxes: Domestic market obligations of 25% of crude oil. DMO for gas is unknown

Cost Accounting: Depreciation is calculated using a straight line method; Exploration costs are depreciated over 5 year and development costs over 7 years.
Ring-fencing of costs applies by contract.

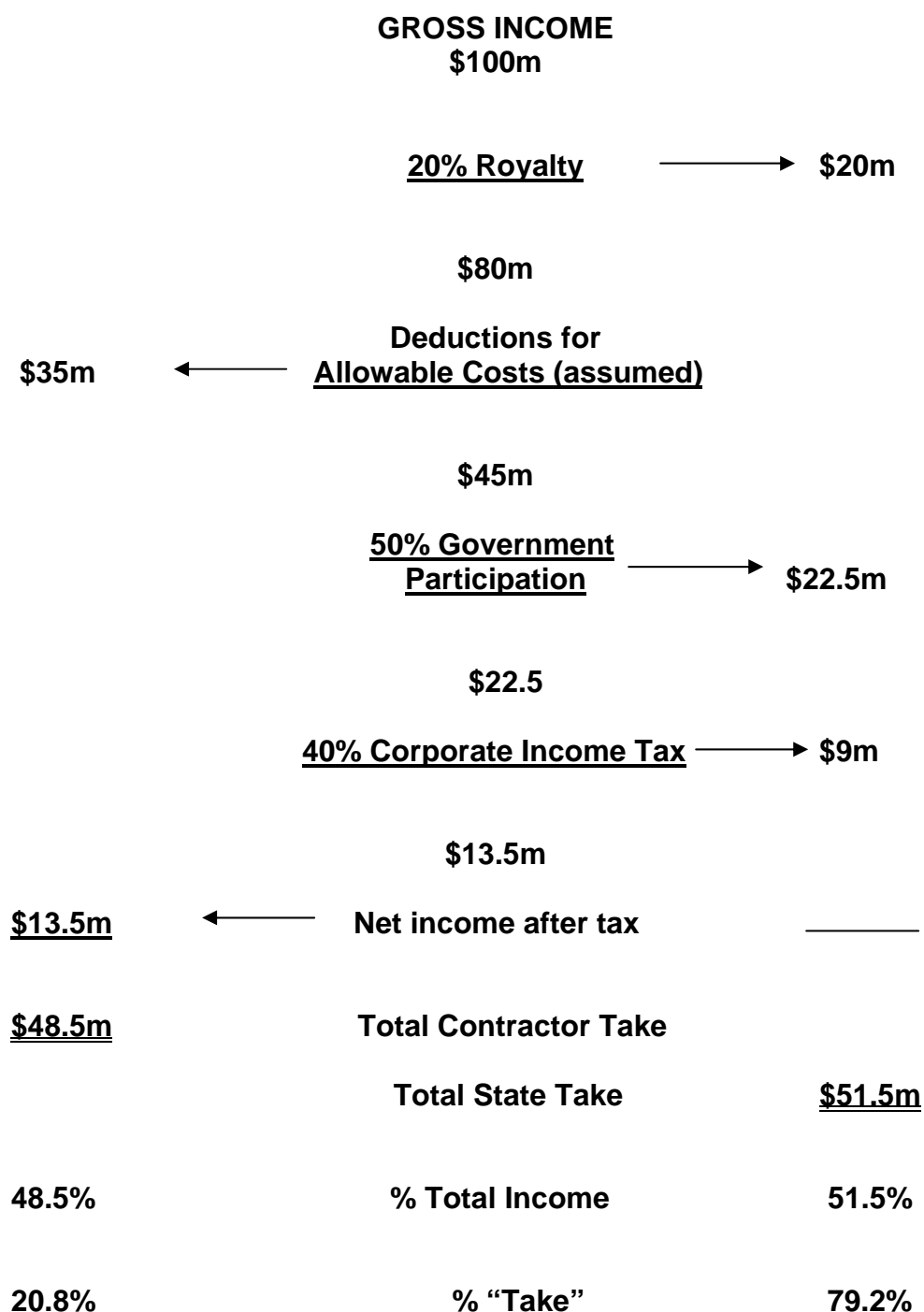


FLOW DIAGRAM FOR COLOMBIA
EARLY 1980S RISK ASSOCIATION CONTRACT

Based on Gross Income of \$100m

Contractor Share

State Take



Colombia– Pre 1994 Association Contract

Contract Type: Risk Service Agreement

% Government Take: 81.8%

Core Taxes Used:

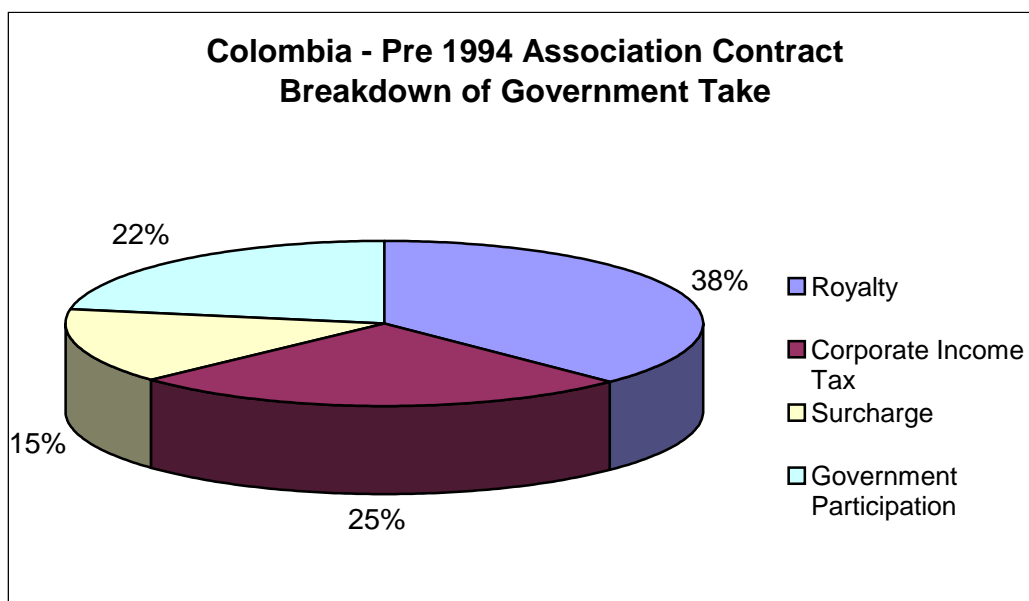
- 1) Royalty – 20%
- 2) Government Participation – 50%
- 3) Corporate Income Tax – 30%
- 4) Surtax - 25%

- 1) Royalty (20%) is calculated on gross revenues
- 2) Government Participation at 50%.
- 3) Corporate income tax is levied at a rate of 30% on net income after deduction of costs and royalties.
- 4) The contract includes a 25% surcharge between 1993-1997, calculated post corporate income tax deductions.

Other Taxes: Remittance Tax 12-15%

Domestic market obligations of 75% of fair market value in US\$

Cost Accounting: Depreciation is calculated using a straight line method; Exploration costs are depreciated over 5 year and development costs over 7 years.
Ring-fencing of costs applies by contract.

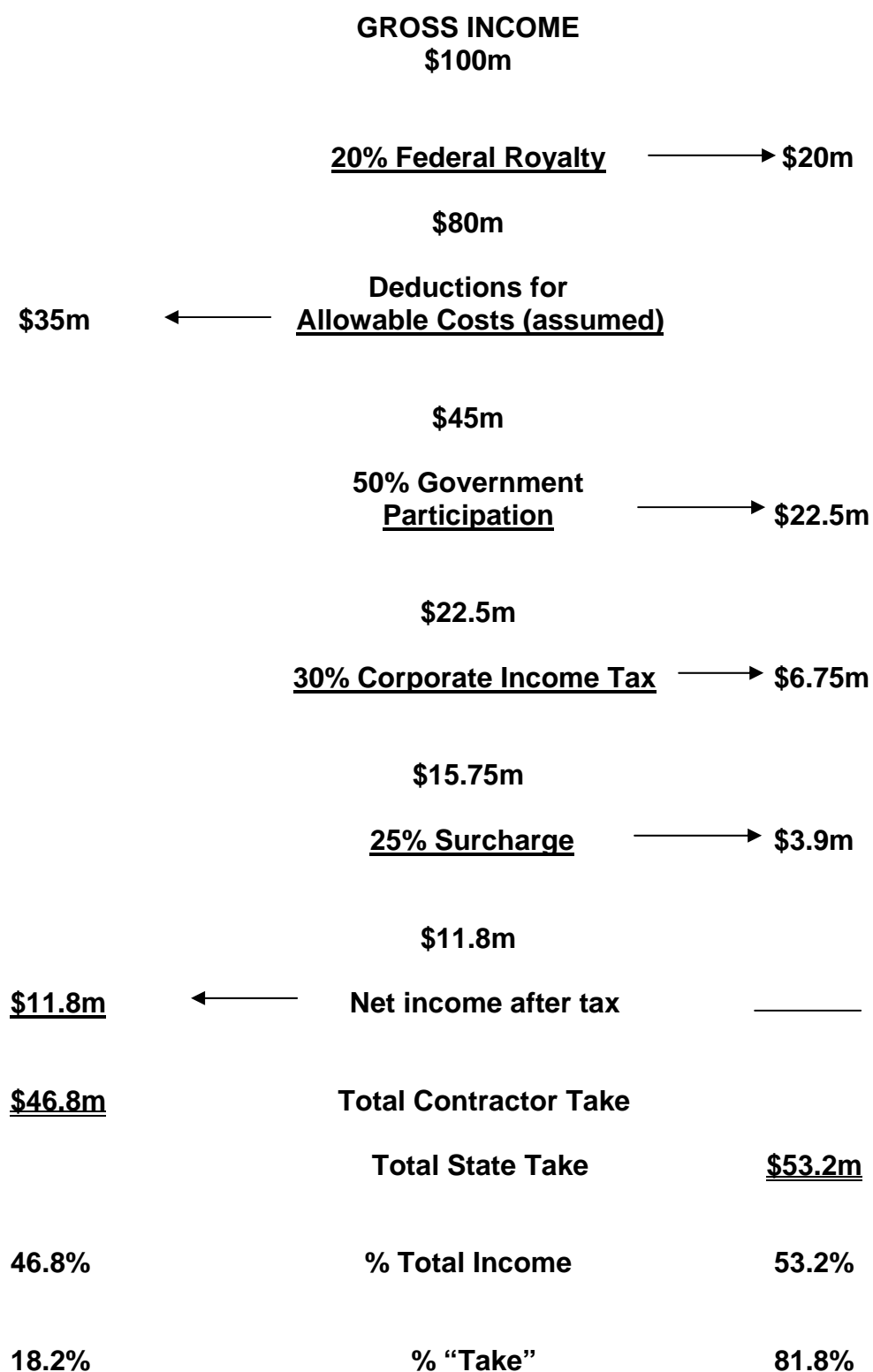


**FLOW DIAGRAM FOR COLOMBIA
PRE 1994 ASSOCIATION CONTRACT**

Based on Gross Income of \$100m

Contractor Share

State Take



Colombia – 2000 Contract Adjustments

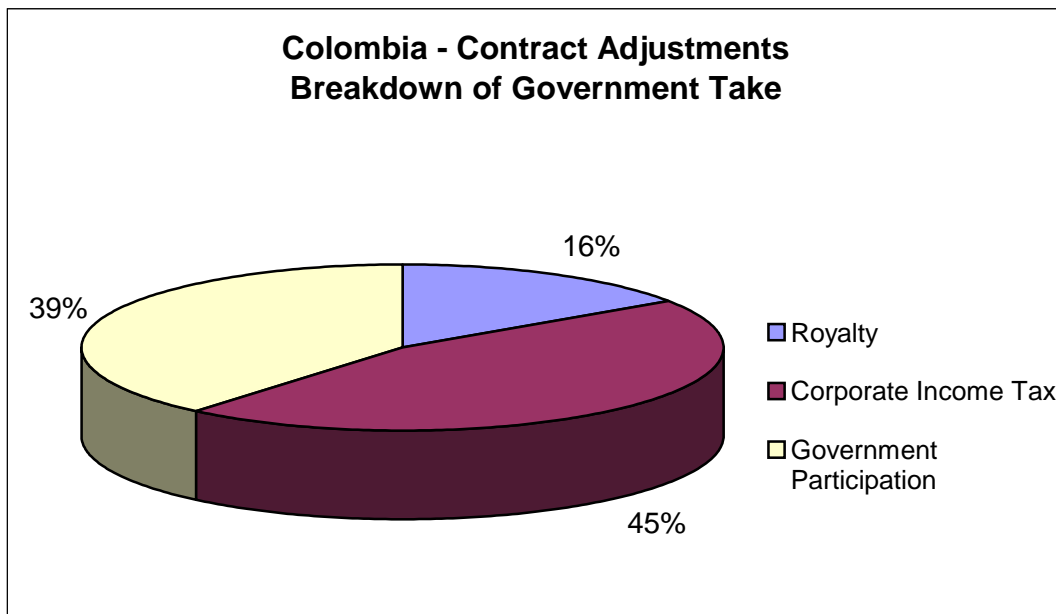
Contract Type: Risk Service Agreement

% Government Take: 68.7%

Core Taxes Used:

- 1) Royalty – 7%
- 2) Government Participation – 46%
- 3) Corporate Income Tax – 35%

- 1) Royalty is calculated on gross revenues, and is a sliding scale (5-25%) based on BOPD.
- 2) Government Participation is based on production percentage after royalties, and is different for oil & associated gas and non-associated gas & condensates. Both types vary between 30 and 60% depending on “R” factor
- 3) Corporate income tax is levied at a rate of 35% on net income after deduction of costs and royalties.

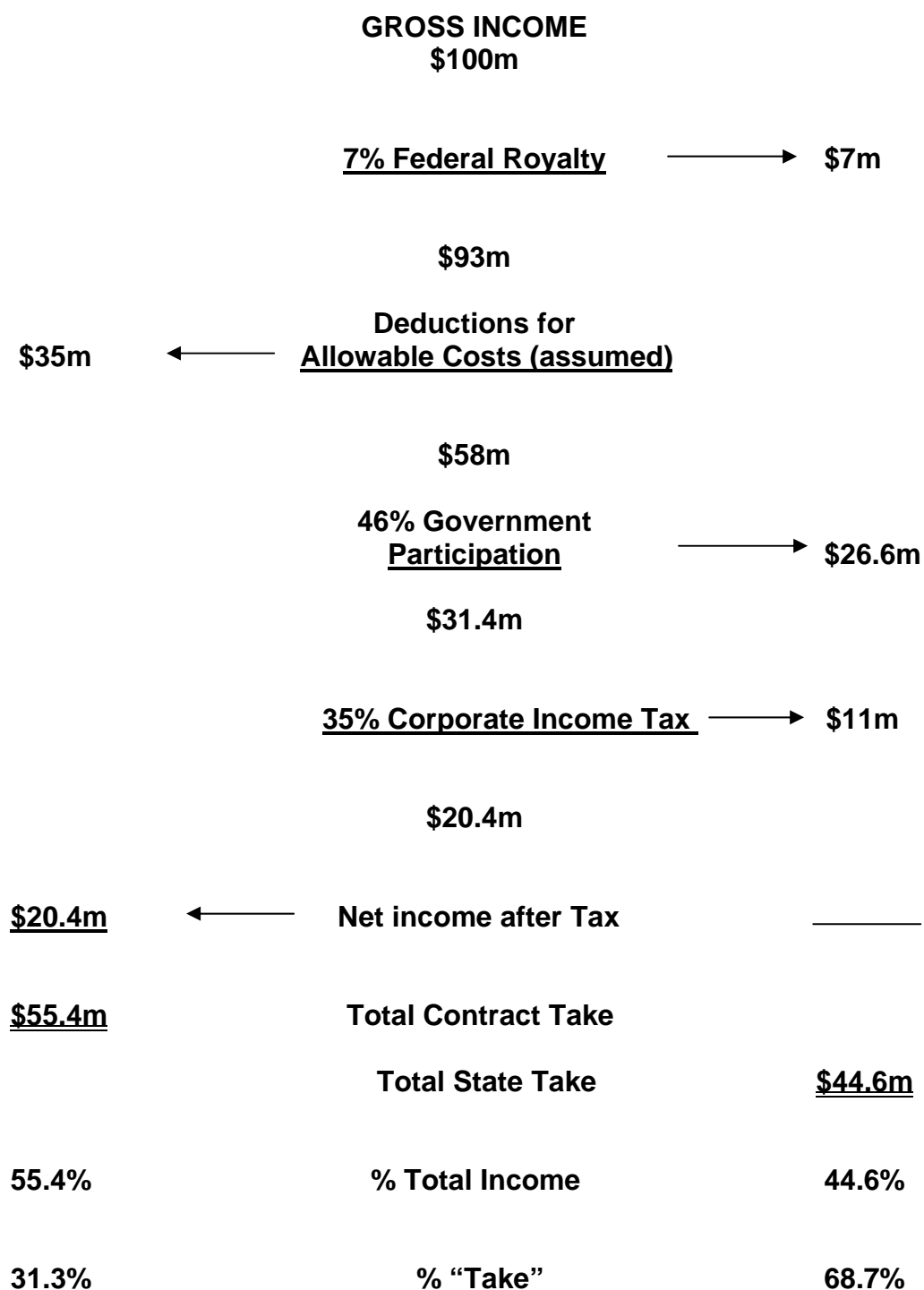


FLOW DIAGRAM FOR COLOMBIA 2000
CONTRACT ADJUSTMENTS

Based on Gross Income of \$100m

Contractor Share

State Take



Colombia– Post 1994 Association Contract

Contract Type: Risk Service Agreement

% Government Take: 83.1%

Core Taxes Used:

- 1) Royalty – 20%
- 2) Government Participation – 62.5%
- 3) Corporate Income Tax – 35%

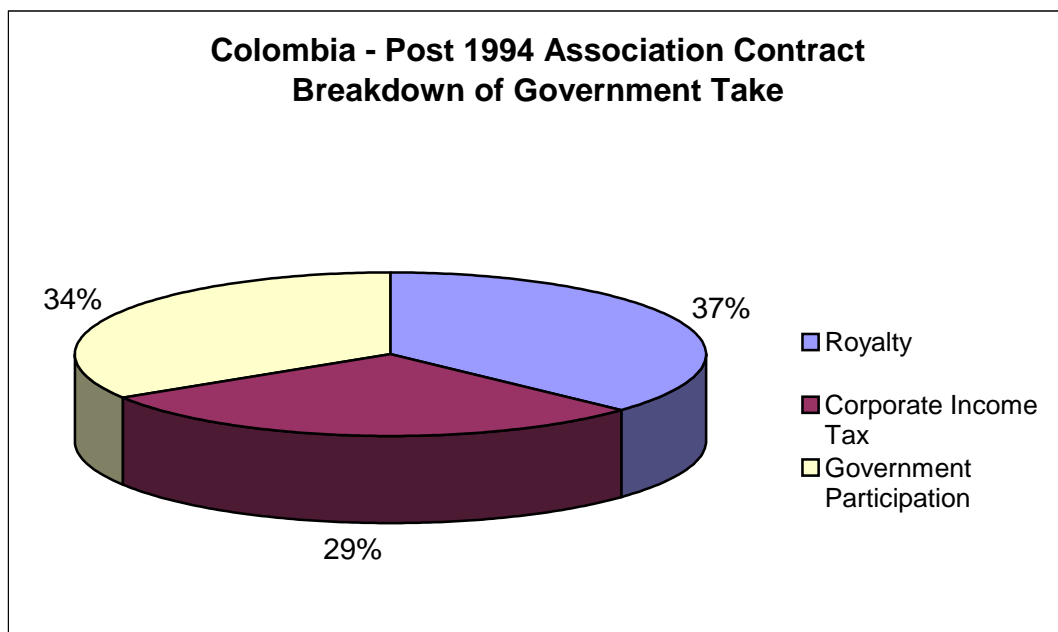
- 1) Royalty (20%) is calculated on gross revenues
- 2) Government Participation is split between 50% carried interest and a sliding scale based on R factor
- 3) Corporate income tax is levied at a rate of 35% on net income after deduction of costs and royalties.

Other Taxes: Remittance Tax 12%, 10% for 1997 and 7% after 1997

1990 War Tax of 600-900 pesos/BBL for the first 6 years of production. Phased out in 1995-1997.

Cost Accounting: Depreciation is calculated using a straight line method; Exploration costs are depreciated over 5 year and development costs over 7 years.

Ring-fencing of costs applies by contract.

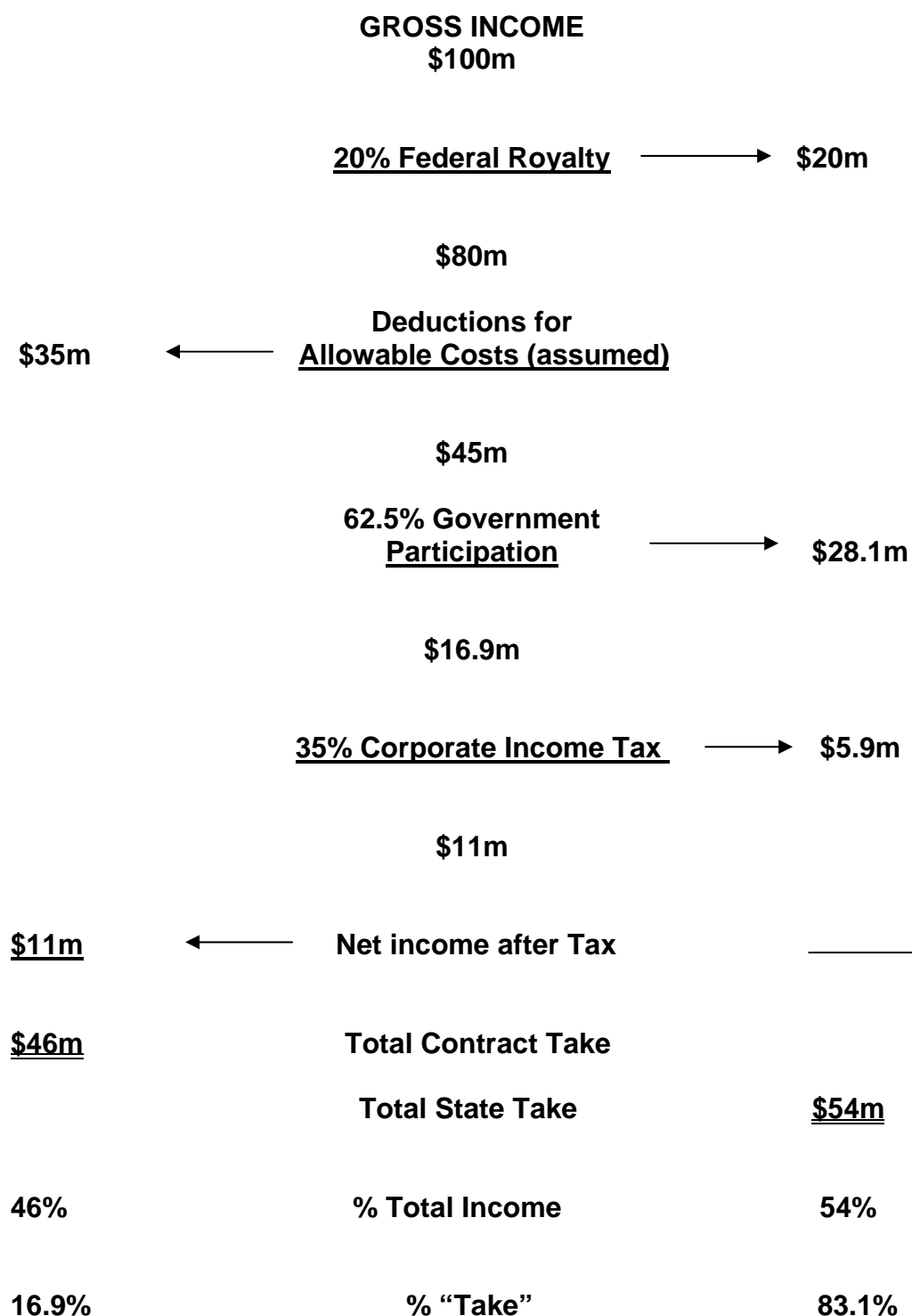


**FLOW DIAGRAM FOR COLOMBIA POST 1994
ASSOCIATION CONTACT**

Based on Gross Income of \$100m

Contractor Share

State Take



Colombia– Pre 1994 Risk Participation Contract

Contract Type: Risk Service Agreement

% Government Take: 84.9%

Core Taxes Used:

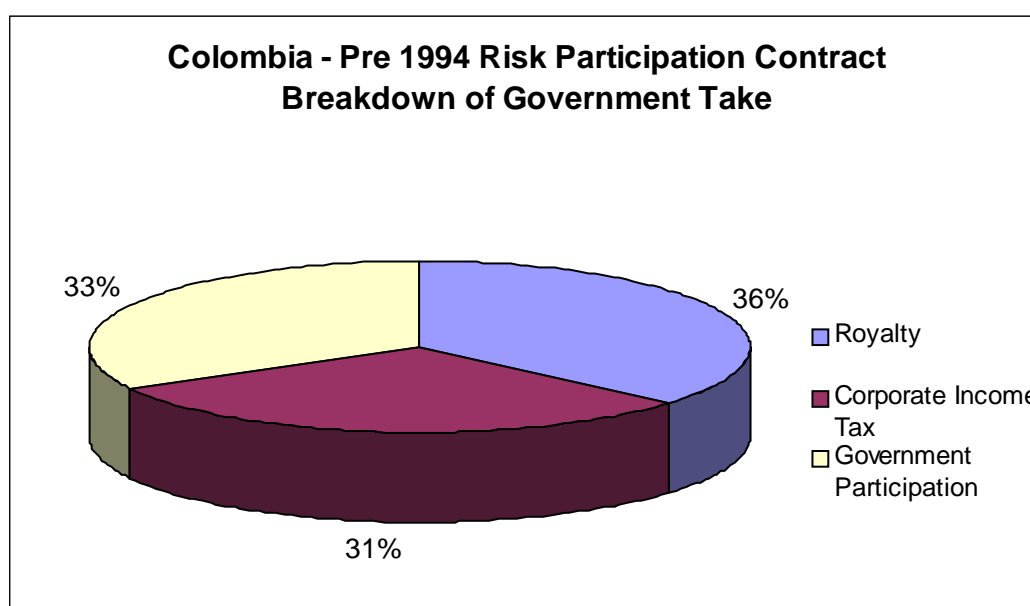
- 1) Royalty – 20%
- 2) Government Participation – 65%
- 3) Corporate Income Tax – 37.5%

- 1) Royalty (20%) is calculated on gross revenues
- 2) Government Participation is split between 30% heads-up, 20% carried through successful exploration and 15% increased interest after a predetermined production threshold (minimum government contribution for capital costs is 50%).
- 3) Corporate income tax is levied at a rate of 37.5% on net income after deduction of costs and royalties. Income tax falls to 35% after 1995.

Other Taxes: Remittance Tax 12%

Domestic market obligations of 75% of fair market value in US\$

Cost Accounting: Depreciation is calculated using a straight line method; Exploration costs are depreciated over 5 year and development costs over 7 years.
Ring-fencing of costs applies by contract.

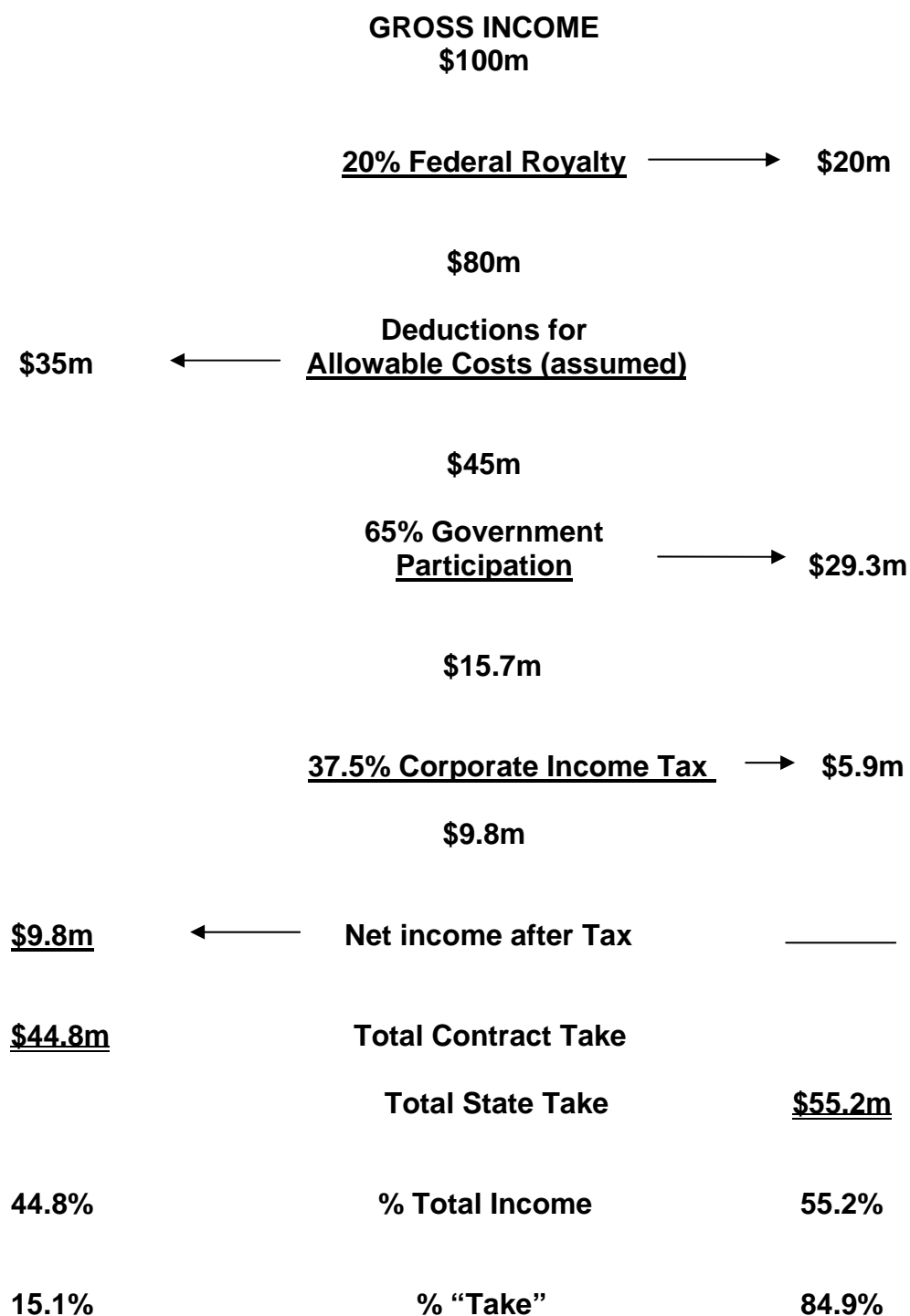


**FLOW DIAGRAM FOR COLOMBIA PRE 1994
RISK PARTICIPATION CONTRACT**

Based on Gross Income of \$100m

Contractor Share

State Take



Colombia –1998 TIBU Incremental Production Contract

Contract Type: Risk Service Agreement

% Government Take: 72.1%

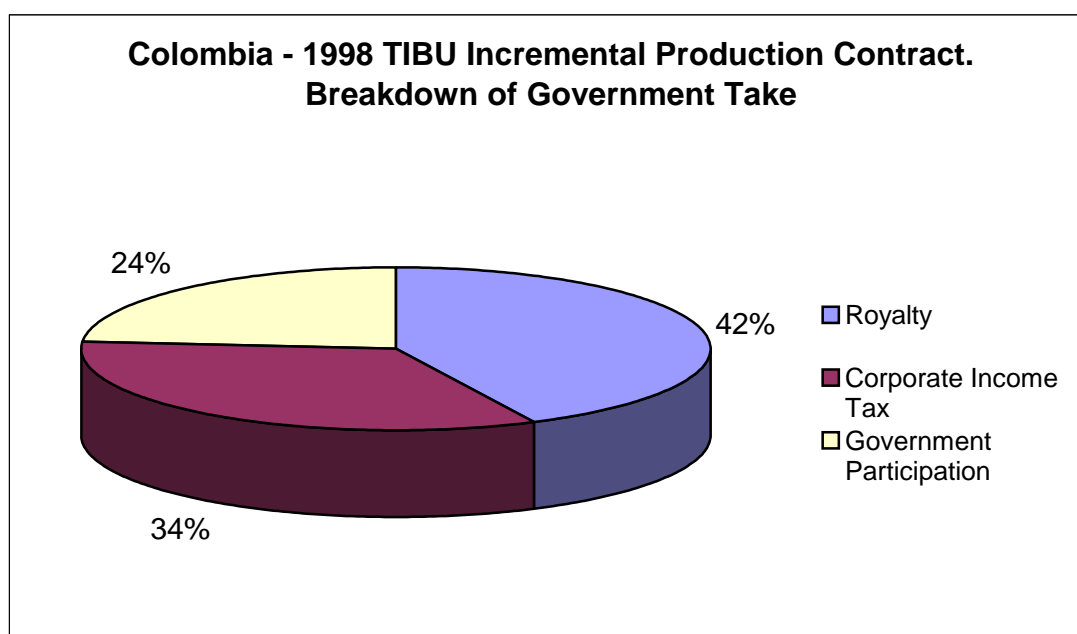
Core Taxes Used:

- 1) Royalty – 20%
- 2) Government Participation – 38%
- 3) Corporate Income Tax – 35%

- 1) Royalty (20%) is calculated on gross revenues
- 2) Government Participation is based on incremental production “R” factor (excluding royalties) and varies between 26.5 and 50%
- 3) Corporate income tax is levied at a rate of 35% on net income after deduction of costs and royalties

Other Taxes: Remittance Tax 7%

Cost Accounting: Ring-fencing of costs applies by contract.



FLOW DIAGRAM FOR COLOMBIA 1998
TIBU INCREMENTAL PRODUCTION CONTRACT

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

20% Federal Royalty **→ \$20m**

\$80m

\$35m **←** **Deductions for**
Allowable Costs (assumed)

\$45m

38% Government
Participation **→ \$17.1m**

\$27.9m

35% Corporate Income Tax **→ \$9.8m**

\$18.1m

\$18.1m **←** **Net income after Tax** **→**

\$53.1m **Total Contract Take**

Total State Take **\$46.9m**

53.1% **% Total Income** **46.9%**

27.9% **% "Take"** **72.1%**

Indonesia – Post 1988/1989 Third Generation (Generasi III)

Contract Type: Production Sharing Contract

% Government Take: 71.8% (85.9% oil)

Core Taxes Used:

- 1) Profit Gas Split (42.31/ 57.69% in favour of contractor)
(Oil Split 71.16 / 28.84% in favour of government)
- 2) Domestic Market Adjustment - 25%
- 3) Corporate Income Tax – 35%

- 1) After contractor's cost recovery, gas split per the above ratio.
- 2) Additional 25% of contractor's share of profit gas (under (1) above) is reclaimed by the government after a period of 60 months from production inception. The government pay below market value for the resource (typically in the region of 10%) to cover the costs of the contractor.
- 3) Corporate income tax is levied at a rate of 35% on net income after profit gas split (including domestic market adjustment).

Other Taxes: Signature Bonuses - Various
Production Bonuses – contract dependent

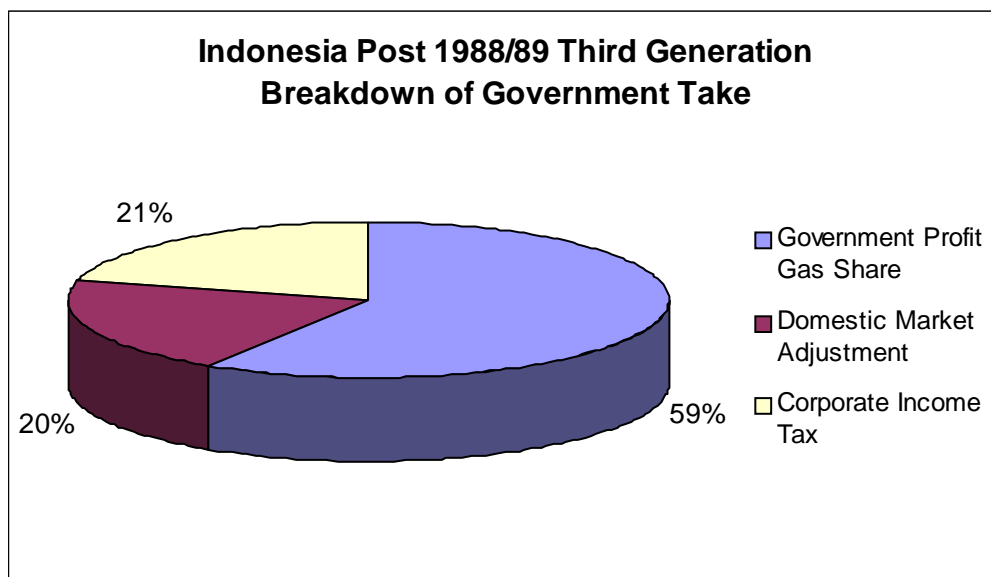
Investment Tax Credits (17% for facility, pipeline and platform expenditure which is then taxable).

Cost recovery limited to 80%

Tax of 20% on dividends.

Cost Accounting: Capital costs depreciated on a 10% Reducing Balance basis with the balance being written off in the 5th year.

Cost ring-fencing applies by license.

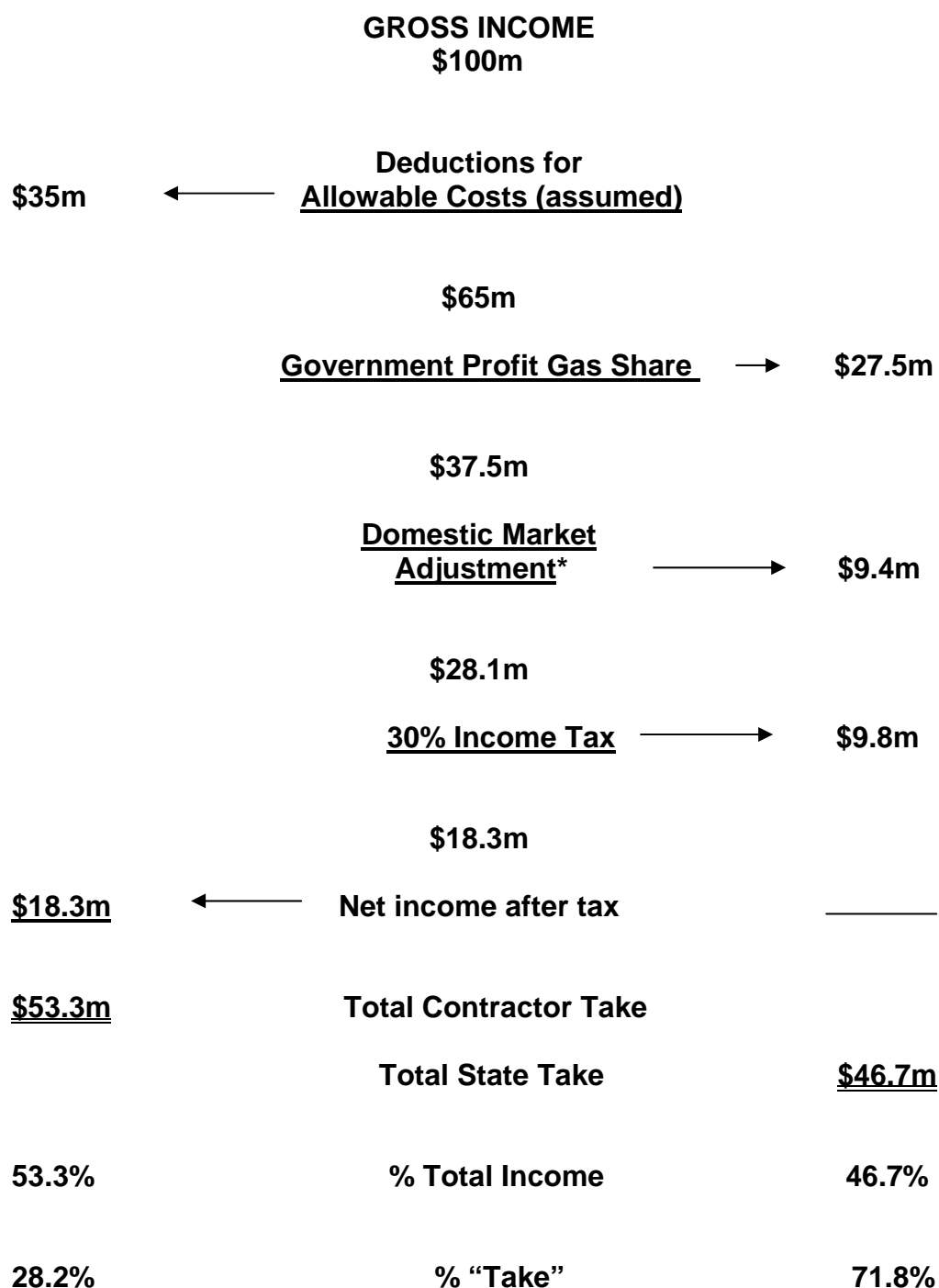


FLOW DIAGRAM FOR INDONESIA
POST 1988/1989 THIRD GENERATION (GENERASI III)

Based on Gross Income of \$100m

Contractor Share

State Take



* = Government entitled to an additional 25% of contractor profit gas, effectively at cost.

Indonesia – Pre-1984 Standard Production Sharing Contract (PSC)

Contract Type: Production Sharing Contract

% Government Take: 67.2% (85.9% oil)

Core Taxes Used:

- 1) Profit Gas Split (20.45 / 79.55% in favour of contractor)
(Oil Split 65.91 / 34.09% in favour of government)
- 2) Domestic Market Adjustment - 25%
- 3) Corporate Income Tax – 45%

- 1) After contractor's cost recovery, gas split per the above ratio.
- 2) Additional 25% of contractor's share of profit gas (under (1) above) is reclaimed by the government after a period of 60 months from production inception. The government pay below market value for the resource (typically in the region of 10%) to cover the costs of the contractor.
- 3) Corporate income tax is levied at a rate of 45% on net income after profit gas split (including domestic market adjustment).

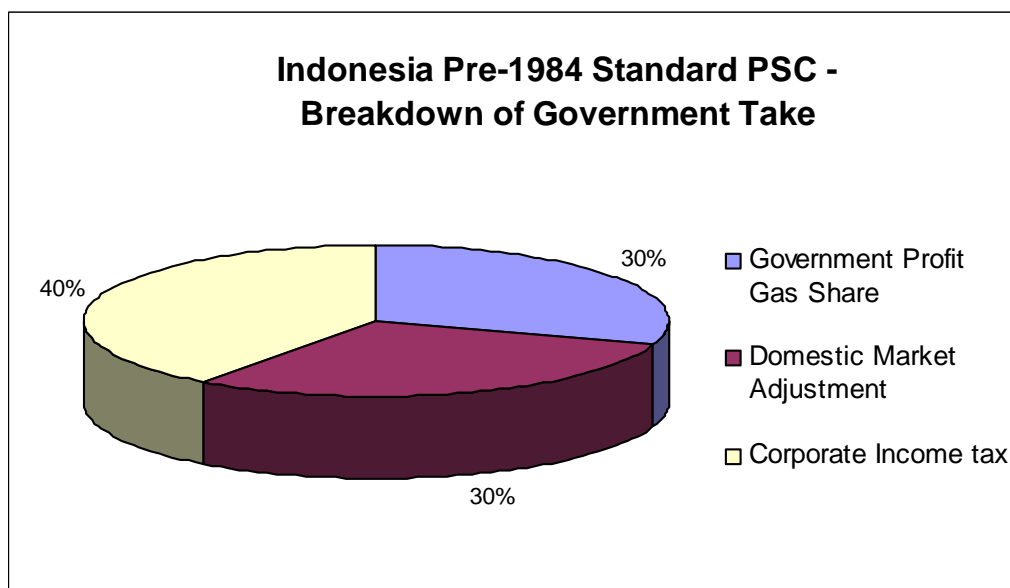
Other Taxes: Signature Bonuses
Production Bonuses

Investment Tax Credits (20% for facility, pipeline and platform expenditure which is then taxable).

Withholding Tax of 20% on dividends.

Cost Accounting: Capital costs depreciated on a 7-year Reducing Balance basis (years 1-7) and switching to Straight-Line (8th year +)

Cost ring-fencing applies by license.

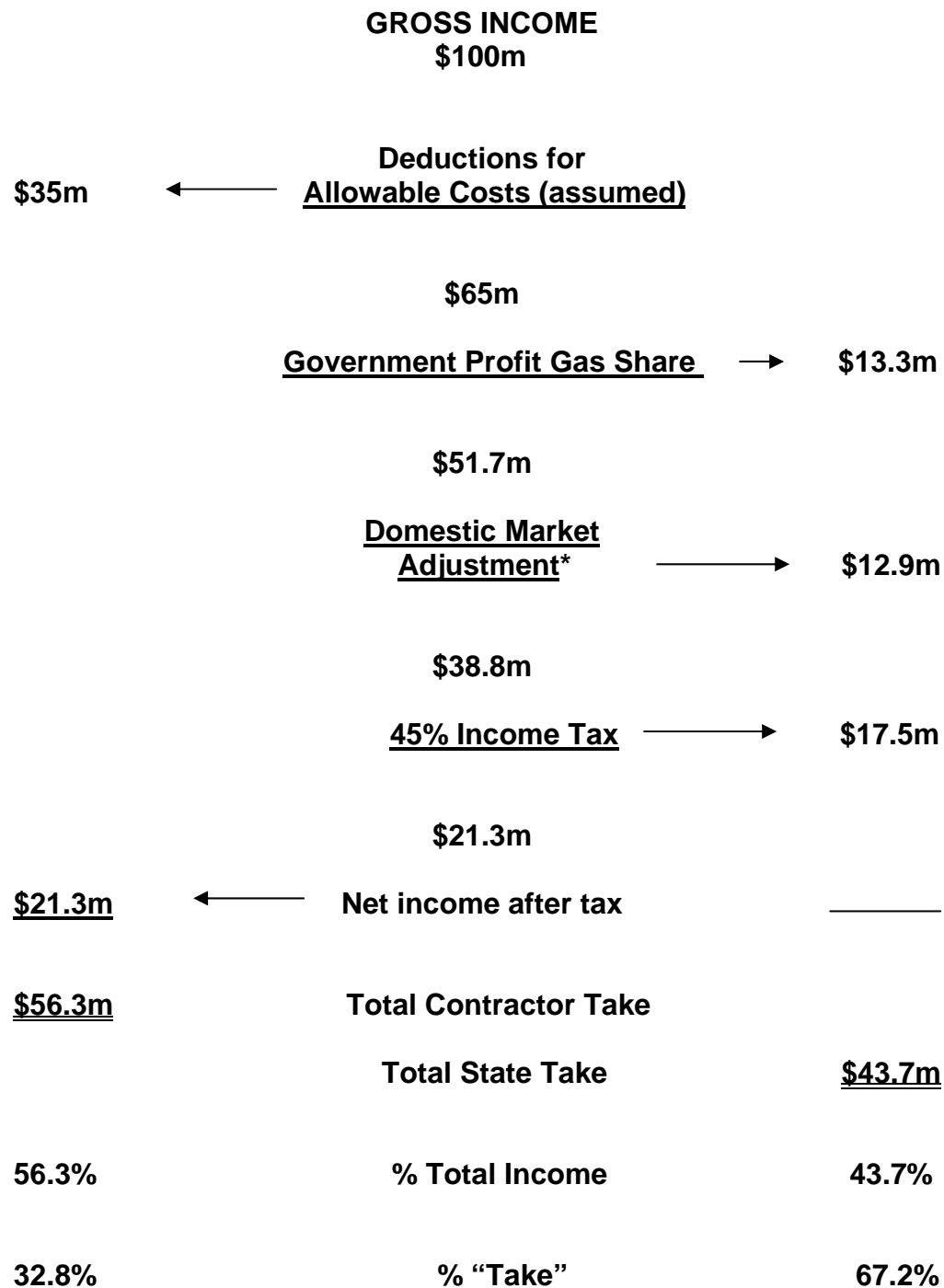


FLOW DIAGRAM FOR INDONESIA
PRE 1984 – STANDARD PSC

Based on Gross Income of \$100m

Contractor Share

State Take



** = Government entitled to an additional 25% of contractor profit gas, effectively at cost.*

Indonesia – 1990 Fifi-Zaitun (PSC-JOA/JOB)

Contract Type: Production Sharing Contract

% Government Take: 71.9% (81.3% oil)

Core Taxes Used:

- 1) Profit Gas Split (42.3 / 57,7% in favour of contractor)
(Oil Split 61.53 /38.47% in favour of government)
- 2) Domestic Market Adjustment - 25%
- 3) Corporate Income Tax – 35%

- 1) After contractor's cost recovery, gas split per the above ratio.
- 2) Additional 25% of contractor's share of profit gas (under (1) above) is reclaimed by the government after a period of 60 months from production inception. The government pay below market value for the resource (typically in the region of 10%) to cover the costs of the contractor.
- 3) Corporate income tax is levied at a rate of 35% on net income after profit gas split (including domestic market adjustment).

Other Taxes: Signature Bonuses
Production Bonuses

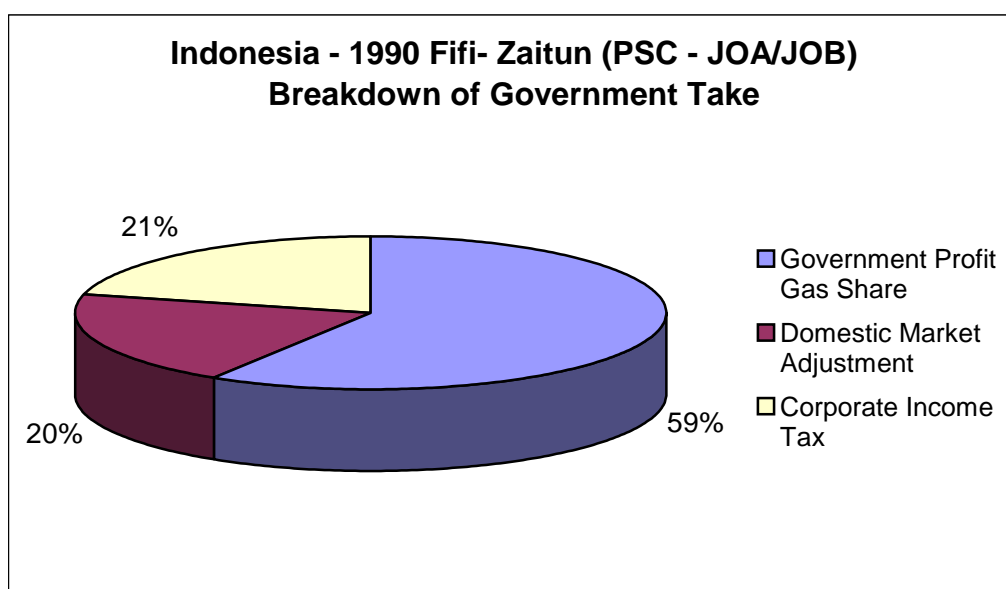
Withholding Tax of 20% on dividends.

Investment Tax Credits (17% for facility, pipeline and platform expenditure which is then taxable).

Cost recovery limited to 85%

Government participation 50% Heads up. However this has not been included in the take figure as the government is liable for this from day one.

Cost Accounting: Cost ring-fencing applies by license.

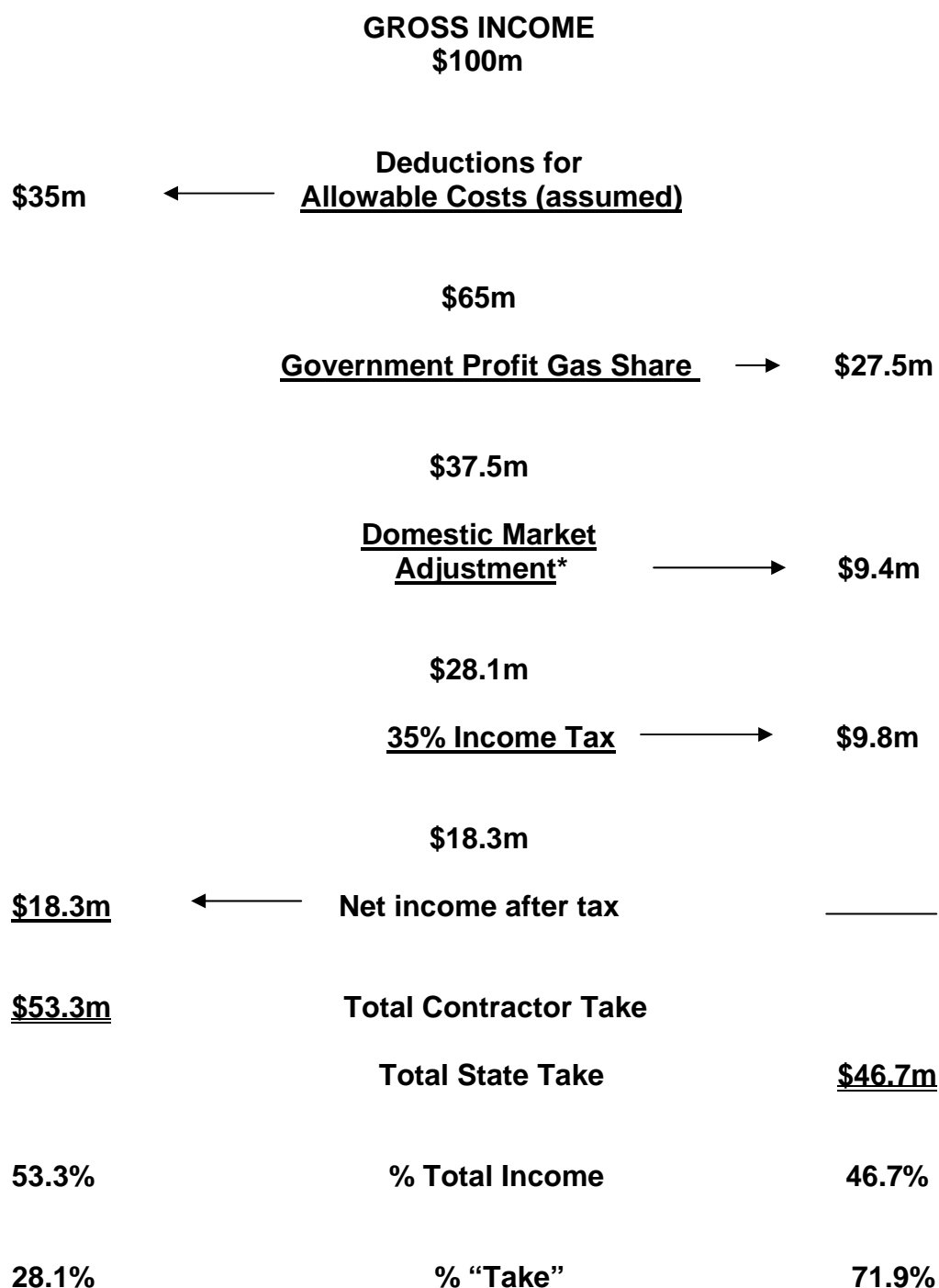


FLOW DIAGRAM FOR INDONESIA
1990 FIFI-ZAITUN (PSC-JOA/JOB)

Based on Gross Income of \$100m

Contractor Share

State Take



* = Government entitled to an additional 25% of contractor profit gas, effectively at cost.

Indonesia – 1994 Frontier Terms (Fourth Exploration Incentive Package)

Contract Type: Production Sharing Contract

% Government Take: 62.5% (68% oil)

Core Taxes Used:

- 1) Profit Gas Split (23.1 / 76.92% in favour of contractor)
(Oil Split 32.69 / 67.31% in favour of contractor)
- 2) Domestic Market Adjustment - 25%
- 3) Corporate Income Tax – 35%

- 1) After contractor's cost recovery, gas split per the above ratio.
- 2) Additional 25% of contractor's share of profit gas (under (1) above) is reclaimed by the government after a period of 60 months from production inception. The government pay below market value for the resource (typically in the region of 10%) to cover the costs of the contractor.
- 3) Corporate income tax is levied at a rate of 35% on net income after profit gas split (including domestic market adjustment).

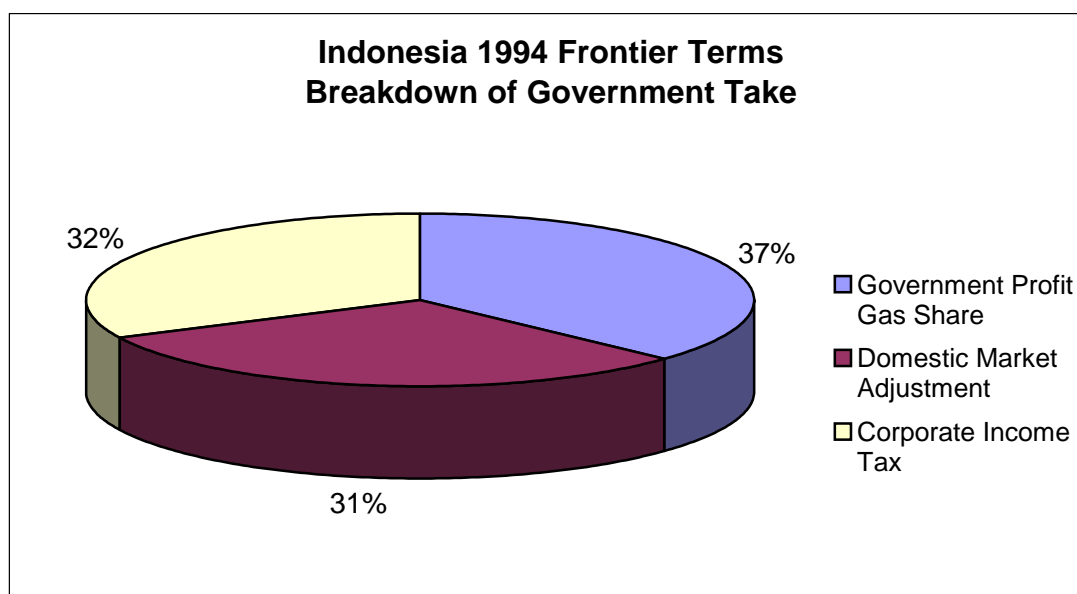
Other Taxes: Bonuses - Negotiable

Withholding Tax of 20% on dividends.

Cost recovery limited to 85%

Cost Accounting: Capital costs depreciated on a 10% Reducing Balance basis with the balance being written off in the 8th year.

Cost ring-fencing applies by license.

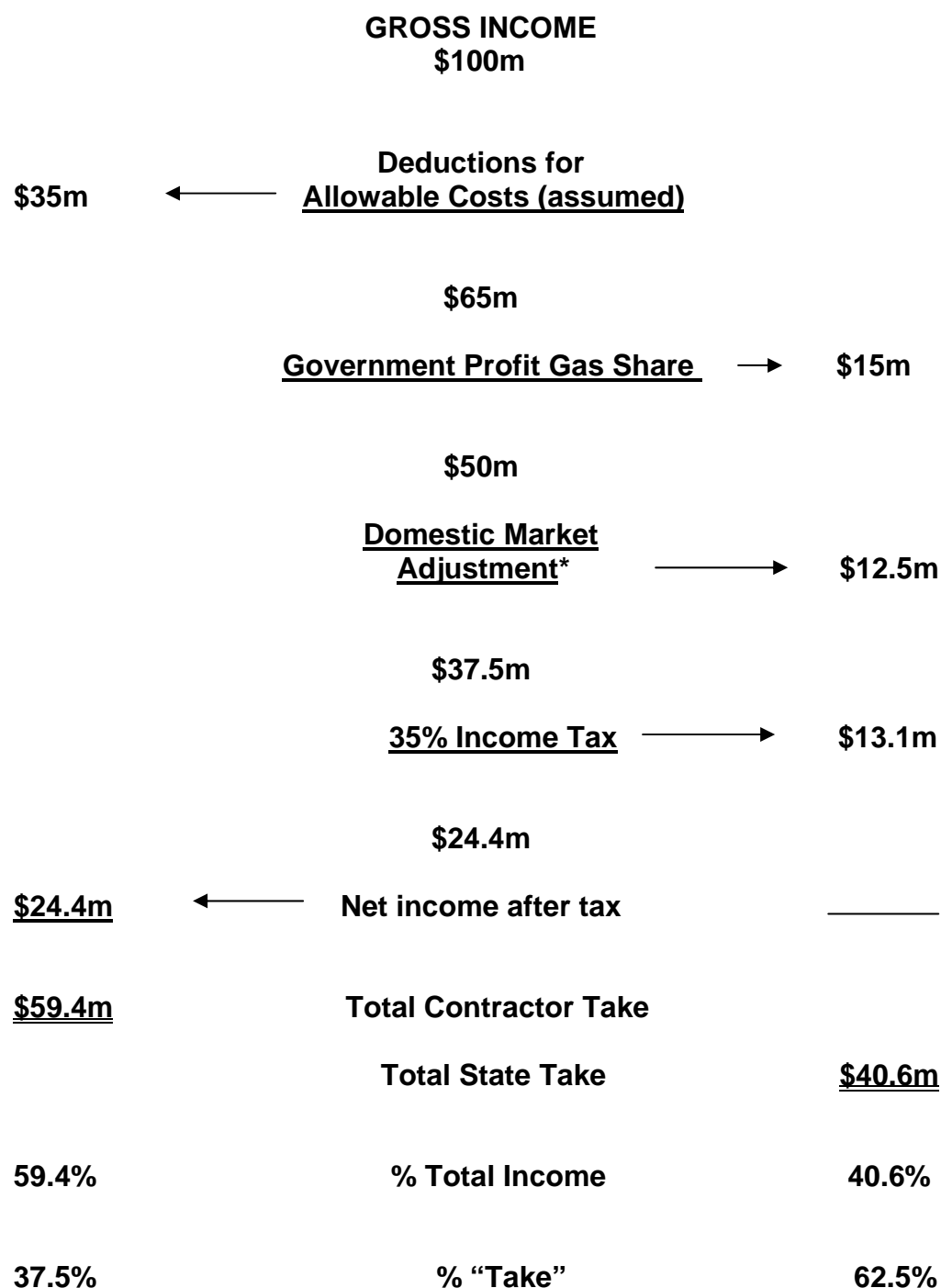


FLOW DIAGRAM FOR INDONESIA
1994 FRONTIER TERMS

Based on Gross Income of \$100m

Contractor Share

State Take



* = Government entitled to an additional 25% of contractor profit gas, effectively at cost.

Indonesia – 1998 East Indonesia Frontier Terms

Contract Type: Production Sharing Contract

% Government Take: 63.6% (69% oil)

Core Taxes Used:

- 1) Profit Gas Split (28.57 / 71.43% in favour of contractor)
(Oil Split 37.5 / 62.5% in favour of contractor)
- 2) Domestic Market Adjustment - 25%
- 3) Corporate Income Tax – 30%

- 1) After contractor's cost recovery, gas split per the above ratio.
- 2) Additional 25% of contractor's share of profit gas (under (1) above) is reclaimed by the government after a period of 60 months from production inception. The government pay below market value for the resource (typically in the region of 10%) to cover the costs of the contractor.
- 3) Corporate income tax is levied at a rate of 30% on net income after profit gas split (including domestic market adjustment).

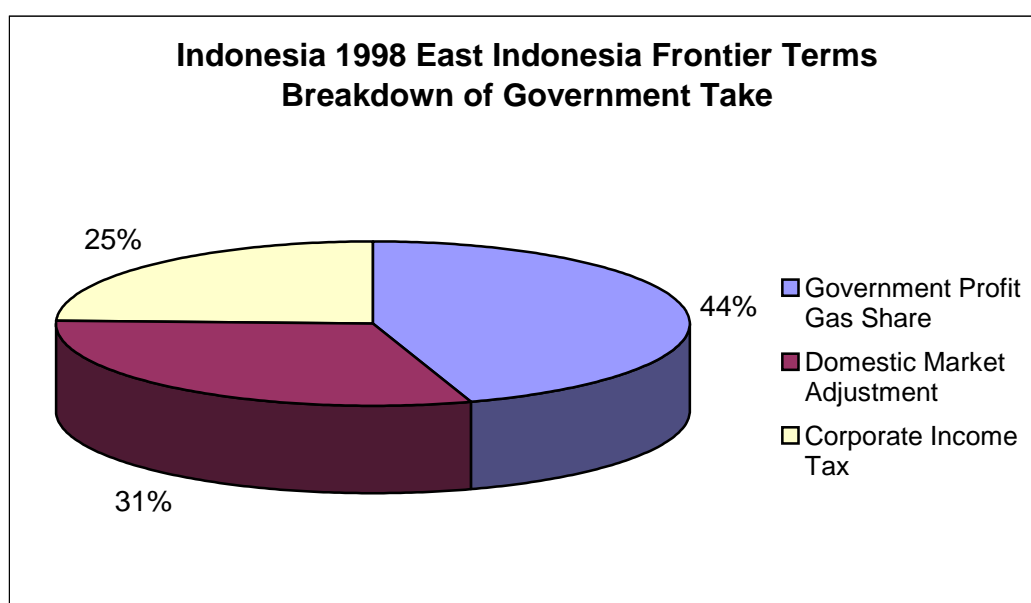
Other Taxes: Signature Bonuses
Production Bonuses

Withholding Tax of 20% on dividends.

Cost recovery limited to 85%

Cost Accounting: Capital costs depreciated on a 10% Reducing Balance basis with the balance being written off in the 8th year.

Cost ring-fencing applies by license.

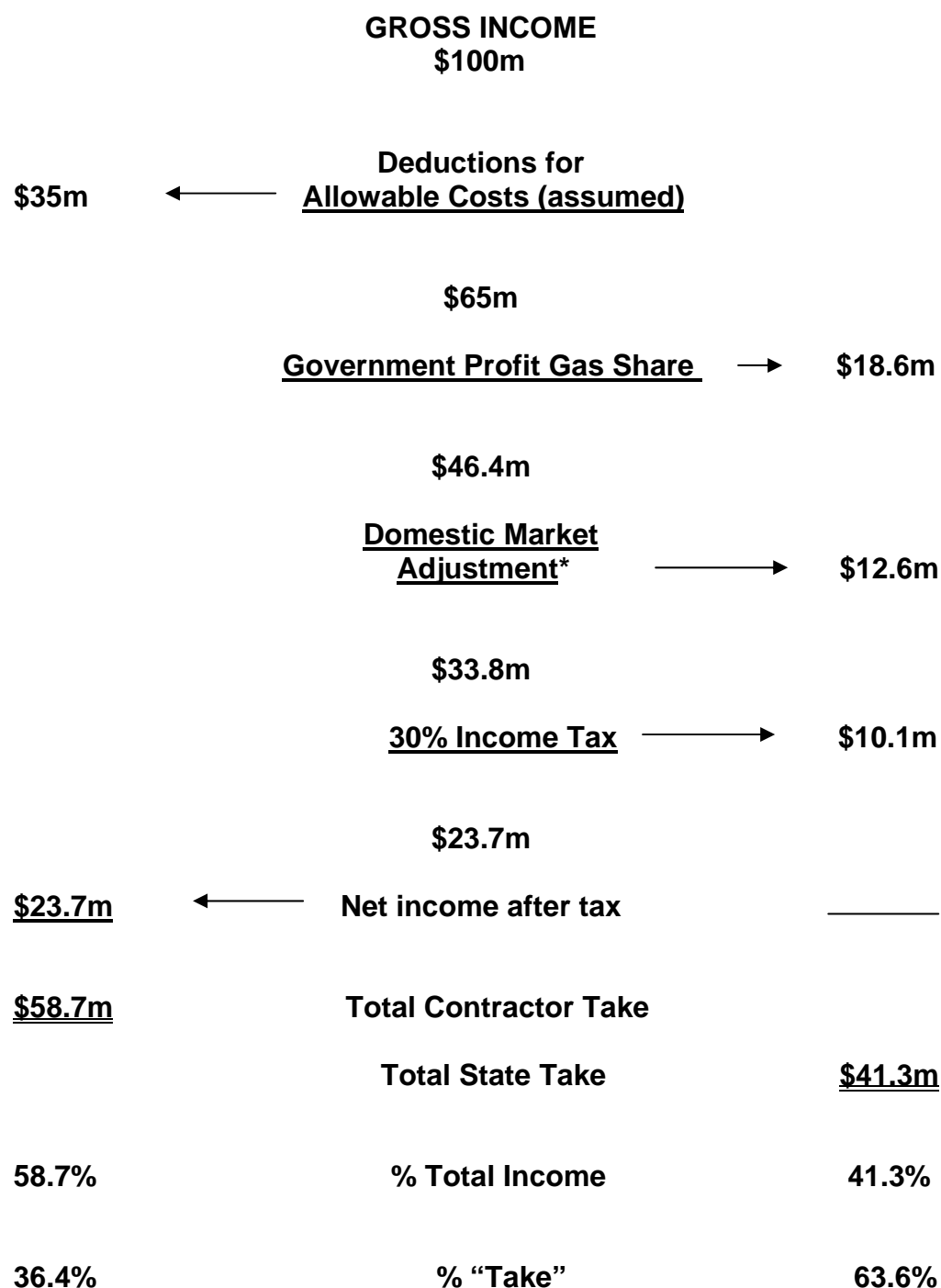


FLOW DIAGRAM FOR INDONESIA
1998 EAST INDONESIA FRONTIER TERMS

Based on Gross Income of \$100m

Contractor Share

State Take



** = Government entitled to an additional 25% of contractor profit gas, effectively at cost.*

Indonesia – Post 1996 Standard Production Sharing Contract (PSC)

Contract Type: Production Sharing Contract

% Government Take: 67.2% (85.9% oil)

Core Taxes Used:

- 1) Profit Gas Split (37.5 / 62.5% in favour of contractor)
(Oil Split 73.21 / 26.79% in favour of government)
- 2) Domestic Market Adjustment - 25%
- 3) Corporate Income Tax – 30%

- 1) After contractor's cost recovery, gas split per the above ratio.
- 2) Additional 25% of contractor's share of profit gas (under (1) above) is reclaimed by the government after a period of 60 months from production inception. The government pay below market value for the resource (typically in the region of 10%) to cover the costs of the contractor.
- 3) Corporate income tax is levied at a rate of 30% on net income after profit gas split (including domestic market adjustment).

Other Taxes: Signature Bonuses - Various
Production Bonuses – contract dependent

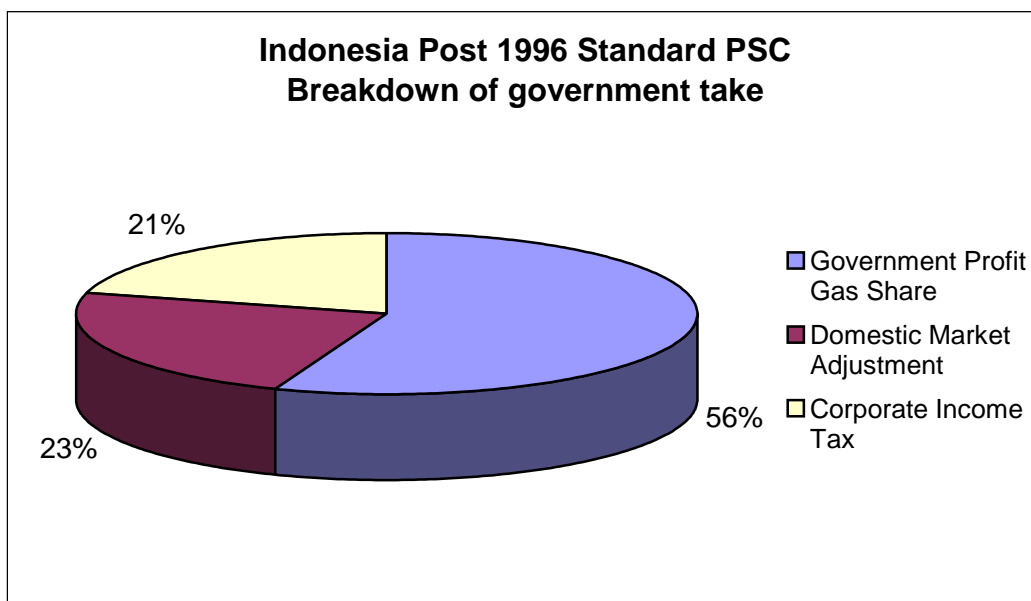
Investment Tax Credits (15.5% for facility, pipeline and platform expenditure which is then taxable).

Cost recovery limited to 85%

Withholding Tax of 20% on dividends.

Cost Accounting: Capital costs depreciated on a 10% Reducing Balance basis with the balance being written off in the 5th year. Intangible and exploration costs are treated as expenses.

Cost ring-fencing applies by license.

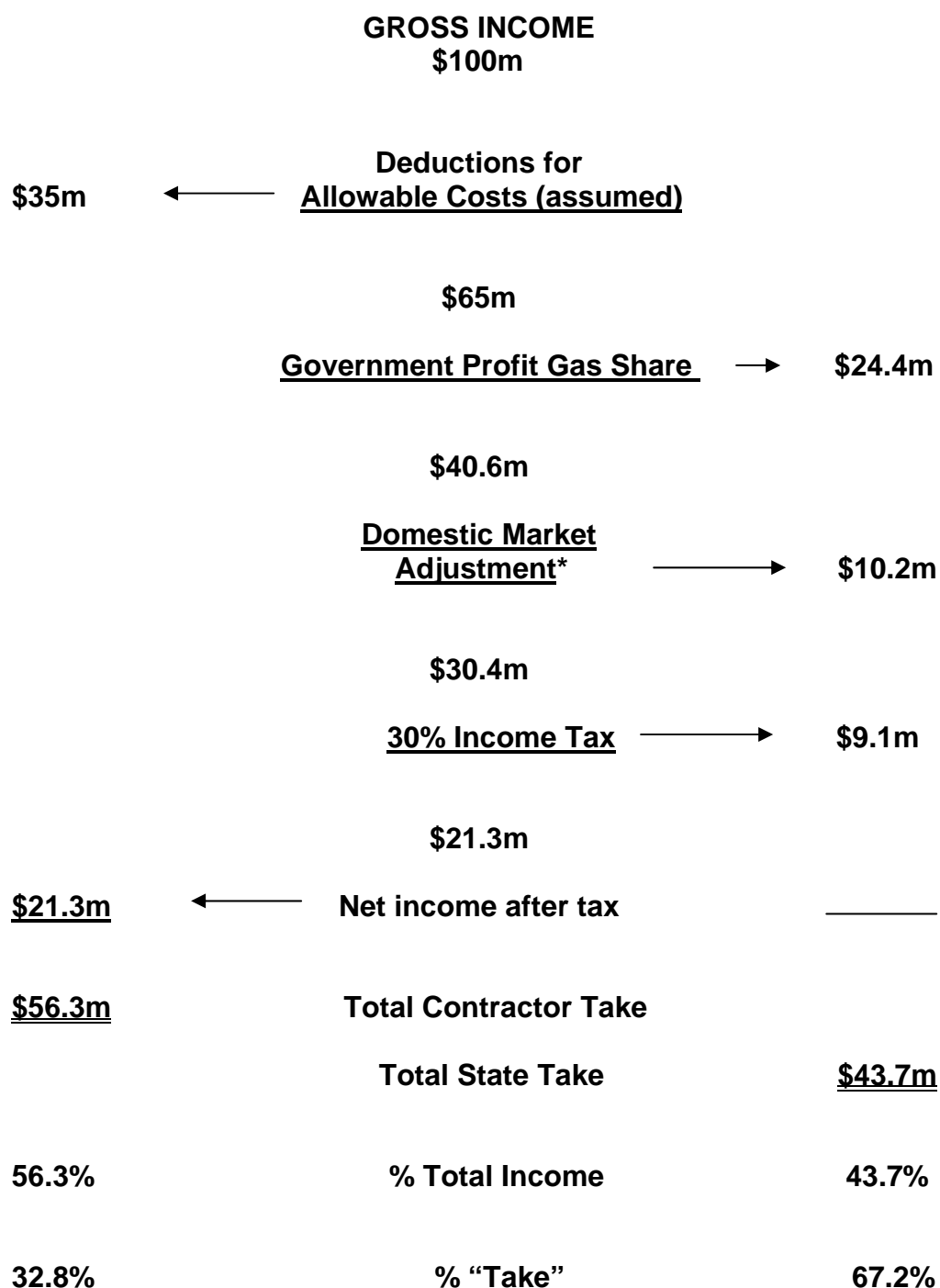


FLOW DIAGRAM FOR INDONESIA
POST 1996 STANDARD PSC

Based on Gross Income of \$100m

Contractor Share

State Take



* = Government entitled to an additional 25% of contractor profit gas, effectively at cost.

Peru – 1995 Lot II License Contract

Contract Type: Royalty Tax System

% Government Take: 78.2%

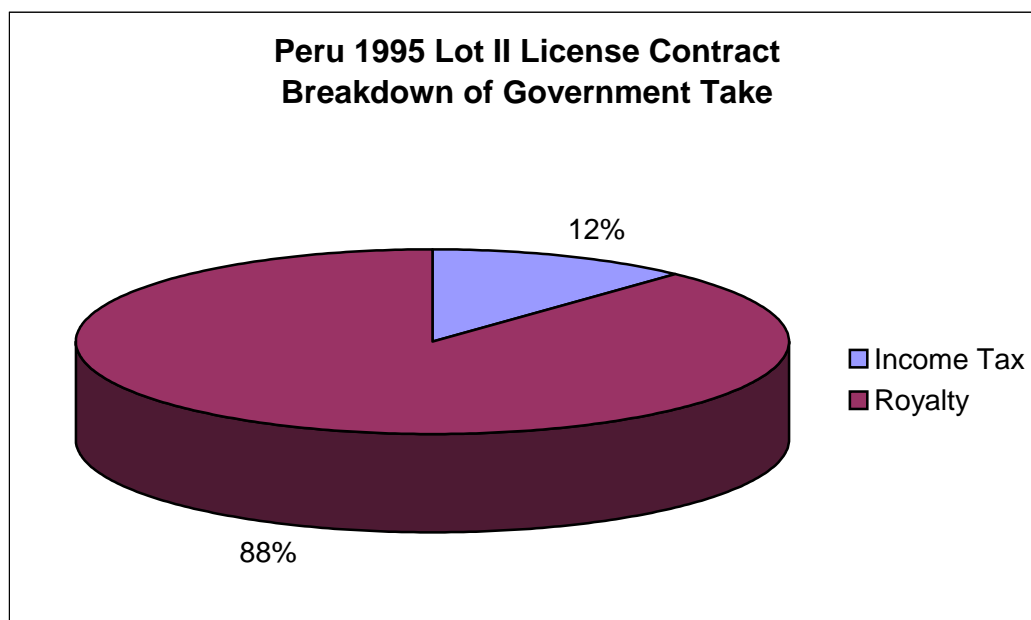
Core Taxes Used: 1) Royalty – 59%
2) Corporate Income Taxes– 30%

- 1) Royalty is determined using a sliding scale based on quantity of oil produced and market price of the oil at the time of production. The sliding scale varies between 20-59%
- 2) Corporate income tax is calculated at 30% on net income after deduction of costs and royalties.

Other Taxes: Withholding Tax of 1%

Cost Accounting: Depreciation is determined on a on a straight line basis over 5 years

No Ring-fencing of costs.



FLOW DIAGRAM FOR PERU
MAY 1995 – LOT II LICENSE CONTRACT

Based on Gross Income of \$100m

Contractor Share

State Take

TOTAL GROSS INCOME
\$100m

“Royalty” * \longrightarrow **\$59m**

CONTRACTOR GROSS INCOME
\$41m

\$14.4m \longleftarrow **Deductions for**
Allowable Costs (assumed)

\$26.6m

30% Income Tax \longrightarrow **\$8m**

\$18.6m

\$18.6m \longleftarrow **Net income after tax** \longrightarrow

\$33m **Total Contractor Take**

Total State Take **\$67m**

33% **% Total Income** **67%**

27.8% **% “Take”** **78.2%**

**= Sliding scale rates based on quantity Oil Produced and Market Price of oil at time of production. Capped at 59%.*

Peru – 1995 Murphy Oil Contract Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 63.6%

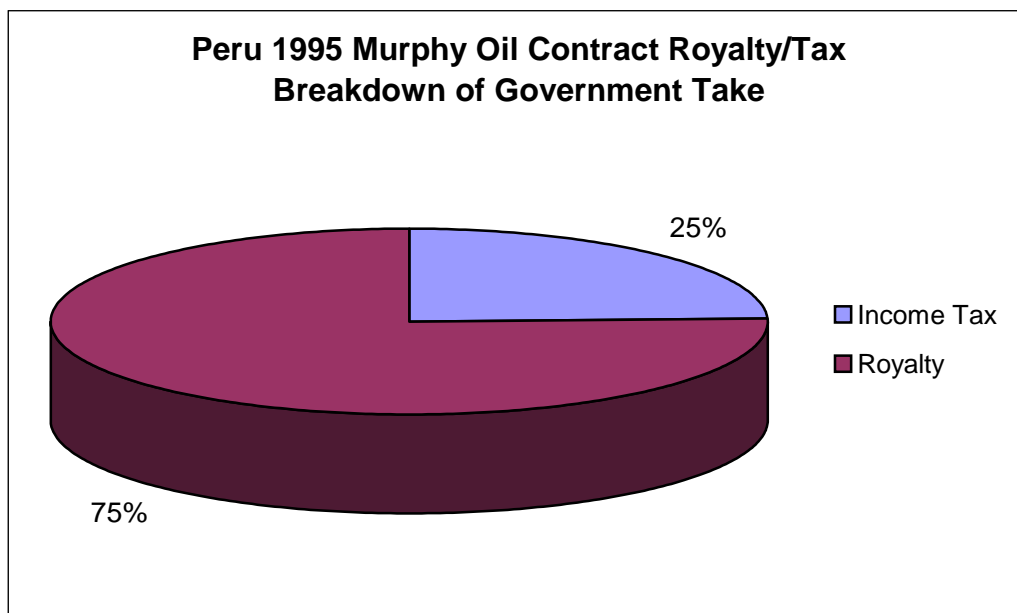
Core Taxes Used: 1) Royalty – 37.5%
2) Corporate Income Taxes– 30%

- 1) Royalty is determined using a sliding scale based on profitability. The scale varies between 18.75-47% .The royalty is calculated on gross revenues.
- 2) Corporate income tax is calculated at 30% on net income after deduction of costs and royalties.

Other Taxes: Withholding Tax of 1%

Cost Accounting: Depreciation is determined on a on a straight line basis over 5 years

No Ring-fencing of costs.



FLOW DIAGRAM FOR PERU
1995 – MURPHY OIL ROYALTY/TAX

Based on Gross Income of \$100m

Contractor Share

State Take

TOTAL GROSS INCOME
\$100m

“Royalty” * \longrightarrow **\$37.5m**

CONTRACTOR GROSS INCOME
\$62.5m

\$21.9m \longleftarrow **Deductions for**
Allowable Costs (assumed)

\$40.6m

30% Income Tax \longrightarrow **\$12.2m**

\$28.4m

\$28.4m \longleftarrow **Net income after tax** \longrightarrow

\$50.3m **Total Contractor Take**

Total State Take **\$49.7m**

50.3% **% Total Income** **49.7%**

36.4% **% “Take”** **63.6%**

* = Sliding scale rates based on “R” Factor. % Royalty taken before cost deduction.

Peru – 1996 Camisea – Mobil/Shell

Contract Type: Royalty Tax System

% Government Take: 63.6%

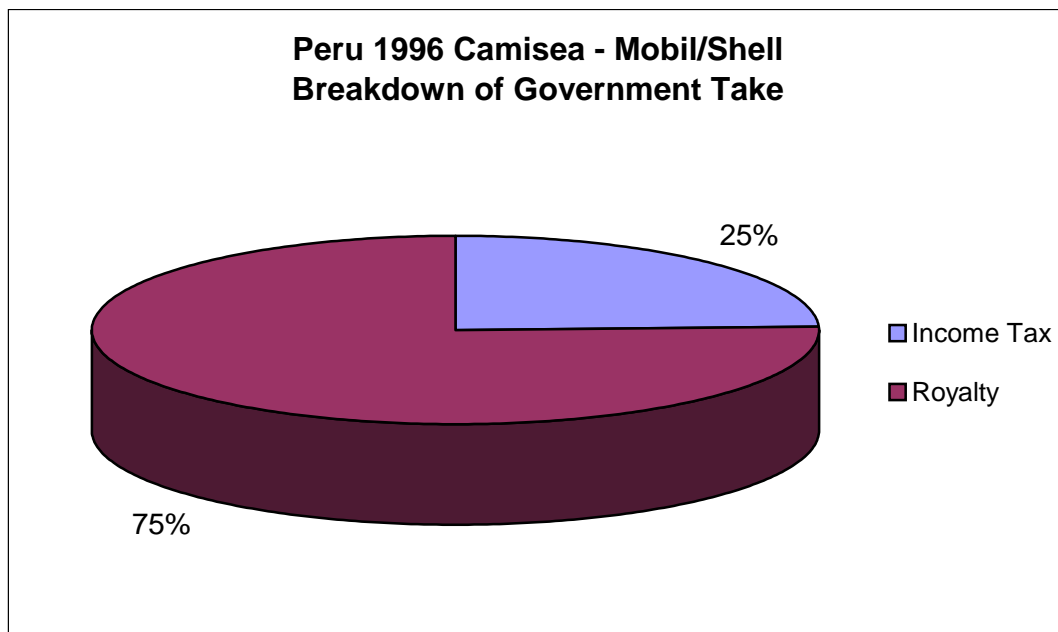
Core Taxes Used: 1) Royalty – 37.5%
2) Corporate Income Taxes– 30%

- 1) Royalty is determined using a sliding scale based on quantity of oil produced and market price of the oil at the time of production. The sliding scale varies between 7-47%
- 2) Corporate income tax is calculated at 30% on net income after deduction of costs and royalties.

Other Taxes: None

Cost Accounting: Depreciation is determined on a on a straight line basis over 5 years

No Ring-fencing of costs.



FLOW DIAGRAM FOR PERU
MAY 1996 – CAMISEA DEVELOPMENT CONTRACT

Based on Gross Income of \$100m

Contractor Share

State Take

TOTAL GROSS INCOME
\$100m

“Royalty” * **—————> \$37.5m**

CONTRACTOR GROSS INCOME
\$62.5m

\$21.9m **←————** **Deductions for**
Allowable Costs (assumed)

\$40.6m

30% Income Tax **—————> \$12.2m**

\$28.4m

\$28.4m **←————** **Net income after tax** **—————**

\$50.3m **Total Contractor Take**

Total State Take **\$49.7m**

50.3% **% Total Income** **49.7%**

36.4% **% “Take”** **63.6%**

* = Sliding scale rates based on “R” factor. Lower Royalties for gas. Equivalent gas royalty as for oil rate used in example = 27%.

Peru – 1989-92 Risk Service Agreement

Contract Type: Risk Service Agreement

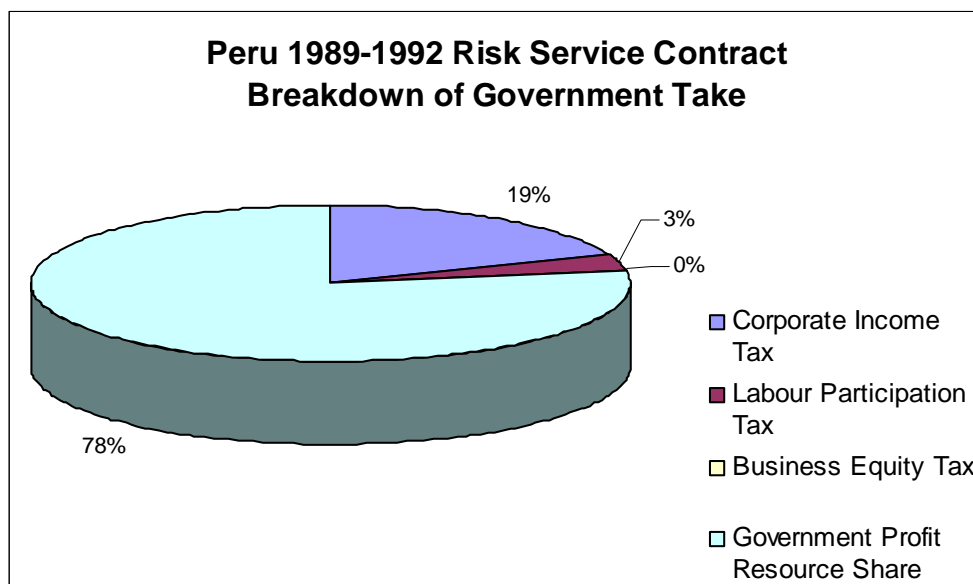
% Government Take: 71.3%

Core Taxes Used: 1) Service Fee (61% - paid to contractor)
2) Corporate Income Taxes – 35.5%

- 1) Government pays a Service fee to the contractor, based on a % of gross revenues. The level of the service fee is based on a complex sliding-scale calculation. The scales range from 40-70%, with 61% the figure used here as for a mid-size contract.
- 2) Corporate income tax is levied at a rate of 30% on the level of the Service Fee paid to the contractor. Business equity tax (0.5%) is also levied here, along with Labour participation tax (5% of total gross revenues).

Other Taxes: Production Bonuses

Cost Accounting: Capital costs depreciated on a 5-year basis (straight-line).

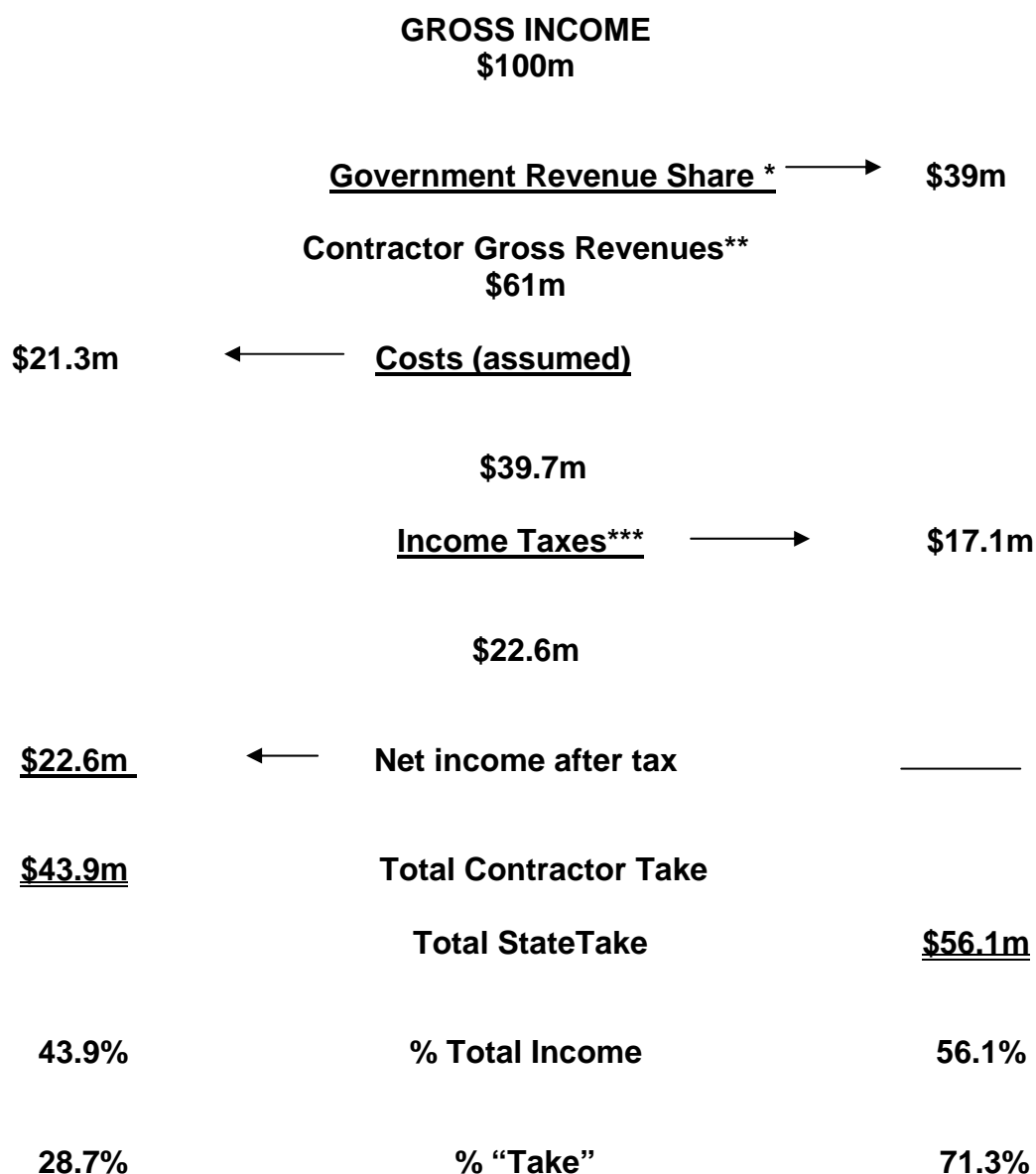


FLOW DIAGRAM FOR PERU
1989-92 – RISK SERVICE AGREEMENT

Based on Gross Income of \$100m

Contractor Share

State Take



** = Complex service fee system, sliding-scale based on profitability gives Service Fee level for Contractor. Remainder is government share.*

*** = In Peruvian model, gross revenues are split rather than profits. Costs are therefore restricted to 35% of Contractor Gross Revenues.*

**** = Comprises 30.5% income taxes and a 5% Labour Participation Tax which is 5% of total gross revenues.*

Peru– 1994 License Contracts Concessionary

Contract Type: Royalty Tax System

% Government Take: 62.8%

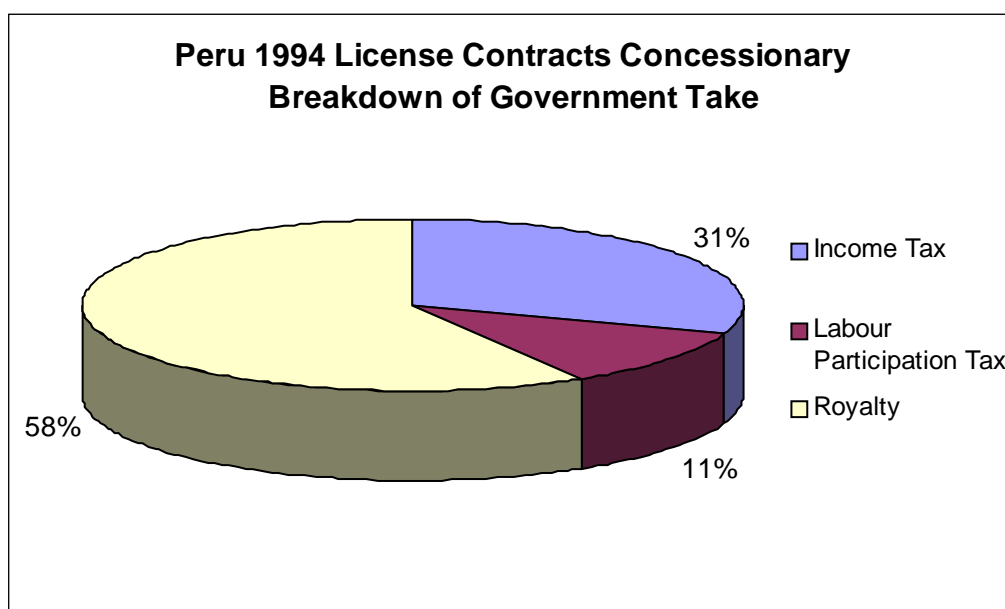
Core Taxes Used: 1) Royalty – 32.5%
2) Corporate Income Taxes– 35.5%

- 1) The royalty figure consists of a negotiated royalty, which is based on a production dependent sliding scale (between 15-35%) and a 5% labour participation tax. Both are calculated on gross revenues.
- 2) Corporate income taxes comprises of Income Tax (35%), and an additional business equity tax of 0.5% raised on net assets. Income taxes are calculated on the contractor gross revenue less costs.

Other Taxes: Annual training fees during exploration and production

Cost Accounting: Depreciation calculated on a straight line basis over 5 years.

No Ring-fencing of costs.



FLOW DIAGRAM FOR PERU
DECEMBER 1994 "LICENSE" CONCESSIONARY

Based on Gross Income of \$100m

Contractor Share

State Take

TOTAL GROSS INCOME
\$100m

"Royalty" * \longrightarrow **\$27.5m**

CONTRACTOR GROSS INCOME
\$72.5m

Labour Participation Tax ** \longrightarrow **\$5m**

\$67.5m

\$25.4m \longleftarrow **Deductions for**
Allowable Costs (assumed)

\$42.1m

30.5% Income Tax *** \longrightarrow **\$14.4m**

\$27.7m

\$27.7m \longleftarrow **Net income after tax** \longrightarrow

\$53.1m **Total Contractor Take**

Total State Take **\$46.9m**

53.1% **% Total Income** **46.9%**

37.2% **% "Take"** **62.8%**

* = Sliding scale rates based on "R" Factor.

** = Includes 0.5% "Business Equity Tax" actually raised on Net Asset values

*** = Fixed % of Total Gross Revenues (5%)

Peru – Risk Service Agreement Oxy block 1A-B

Contract Type: Risk Service Agreement

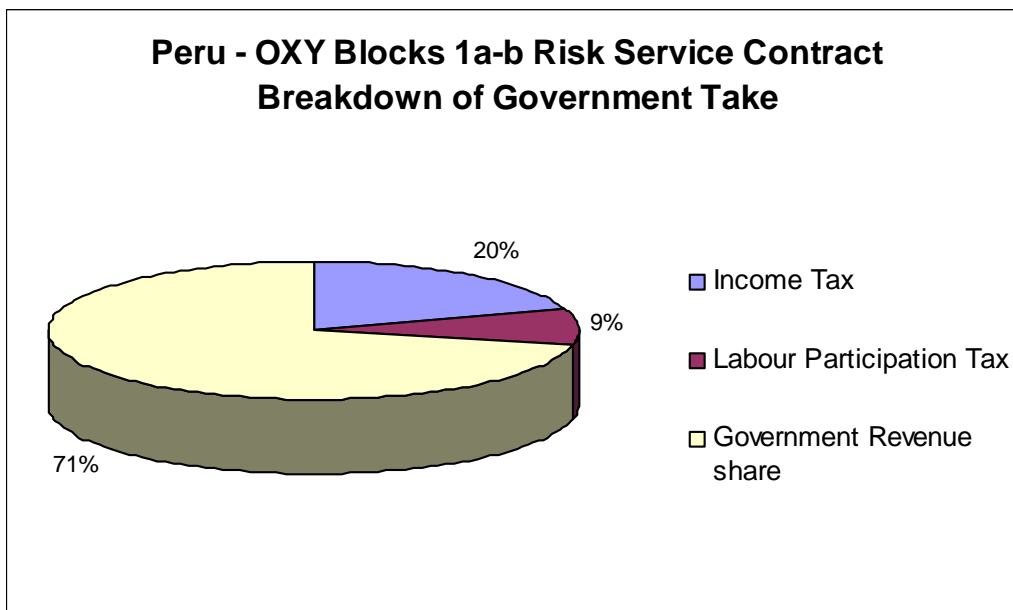
% Government Take: 73.4%

Core Taxes Used: 1) Service Fee (58% - paid to contractor)
2) Corporate Income Taxes – 35.5%

- 1) Government pays a flat Service fee to the contractor, Of 58% of gross revenues.
- 2) Corporate income tax is levied at a rate of 30% on the level of the Service Fee paid to the contractor. Business equity tax (0.5%) is also levied here, along with Labour participation tax (5% of total gross revenues).

Other Taxes: Production Bonuses

Cost Accounting: Capital costs depreciated on a 5-year basis (straight-line).

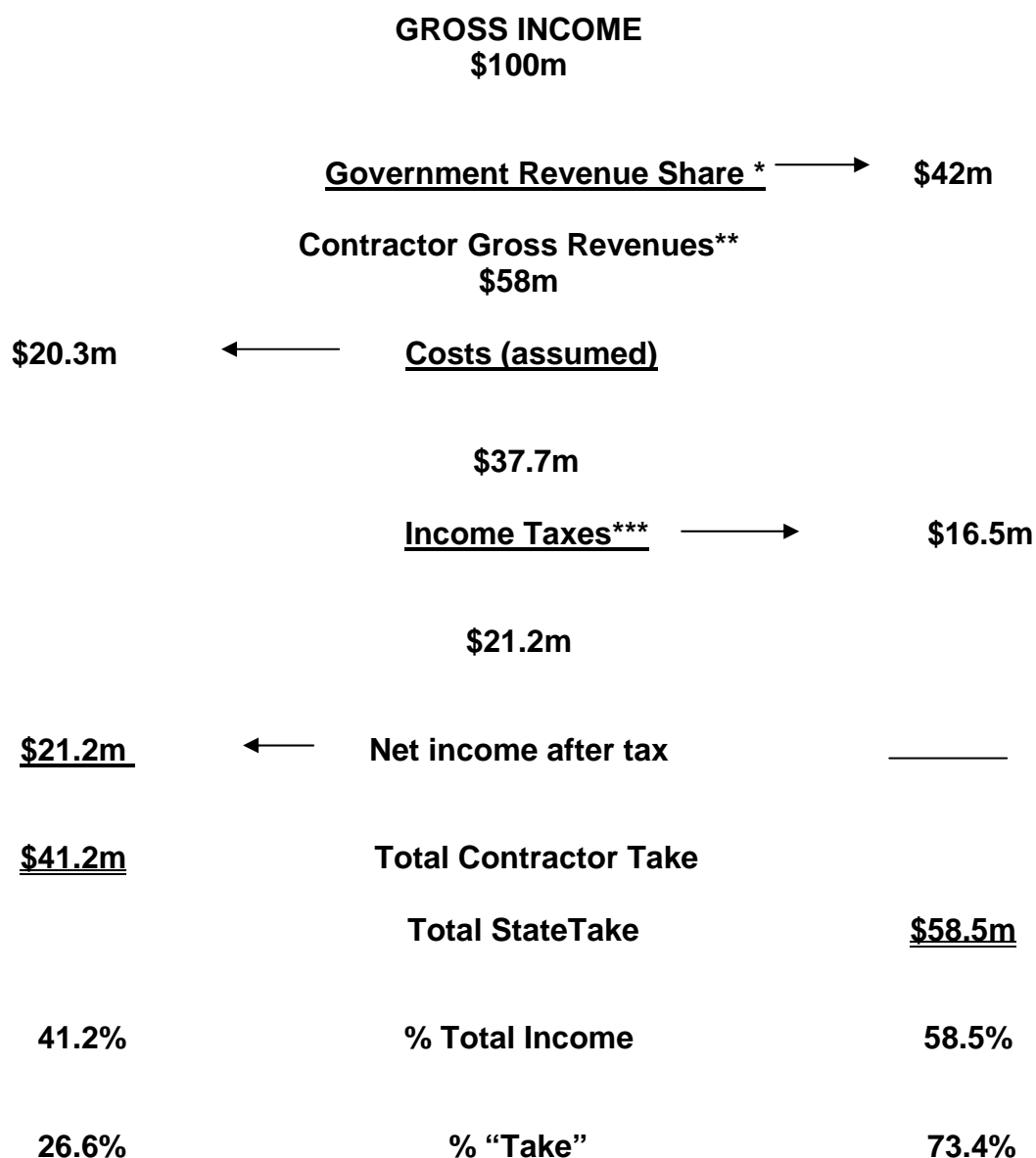


FLOW DIAGRAM FOR PERU
RISK SERVICE AGREEMENT OXY BLOCK 1A-B

Based on Gross Income of \$100m

Contractor Share

State Take



* = Flat service fee of 58% given to Contractor. Remainder is government share.

** = In Peruvian model, gross revenues are split rather than profits. Costs are therefore restricted to 35% of Contractor Gross Revenues.

*** = Comprises 30.5% income taxes and a 5% Labour Participation Tax which is 5% of total gross revenues.

Russia– 1993 Petroconsultants & Others

Contract Type: Production Sharing Contract

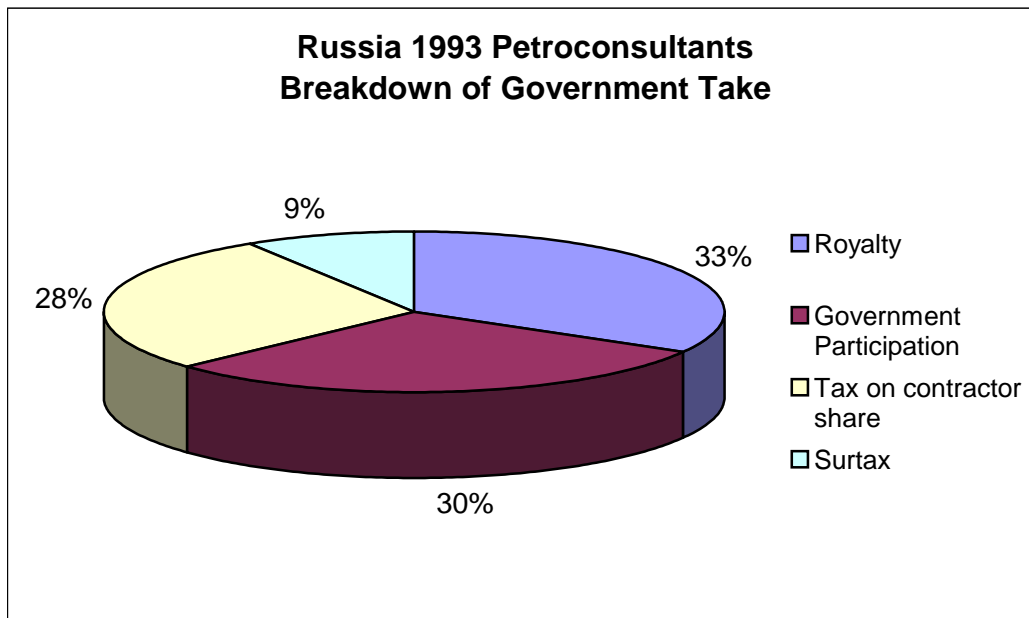
% Government Take: 82.8%

Core Taxes Used:

- 1) Royalty – 18%
- 2) Government Participation - 50%
- 3) Corporate Income Tax – 32%
- 4) Surtax – 30%

- 1) Royalty is calculated on gross revenues at 18%.
- 2) Government participation is 50% after cost recovery, royalty payments and income tax. Government participation is optional by likely.
- 3) Corporate income tax is calculated at 32% of net income after deduction of costs and royalties.
- 4) Surtax is an export tax which is deducted before pay out according to law on customs and tariffs.

Other Taxes: Withholding tax 15%

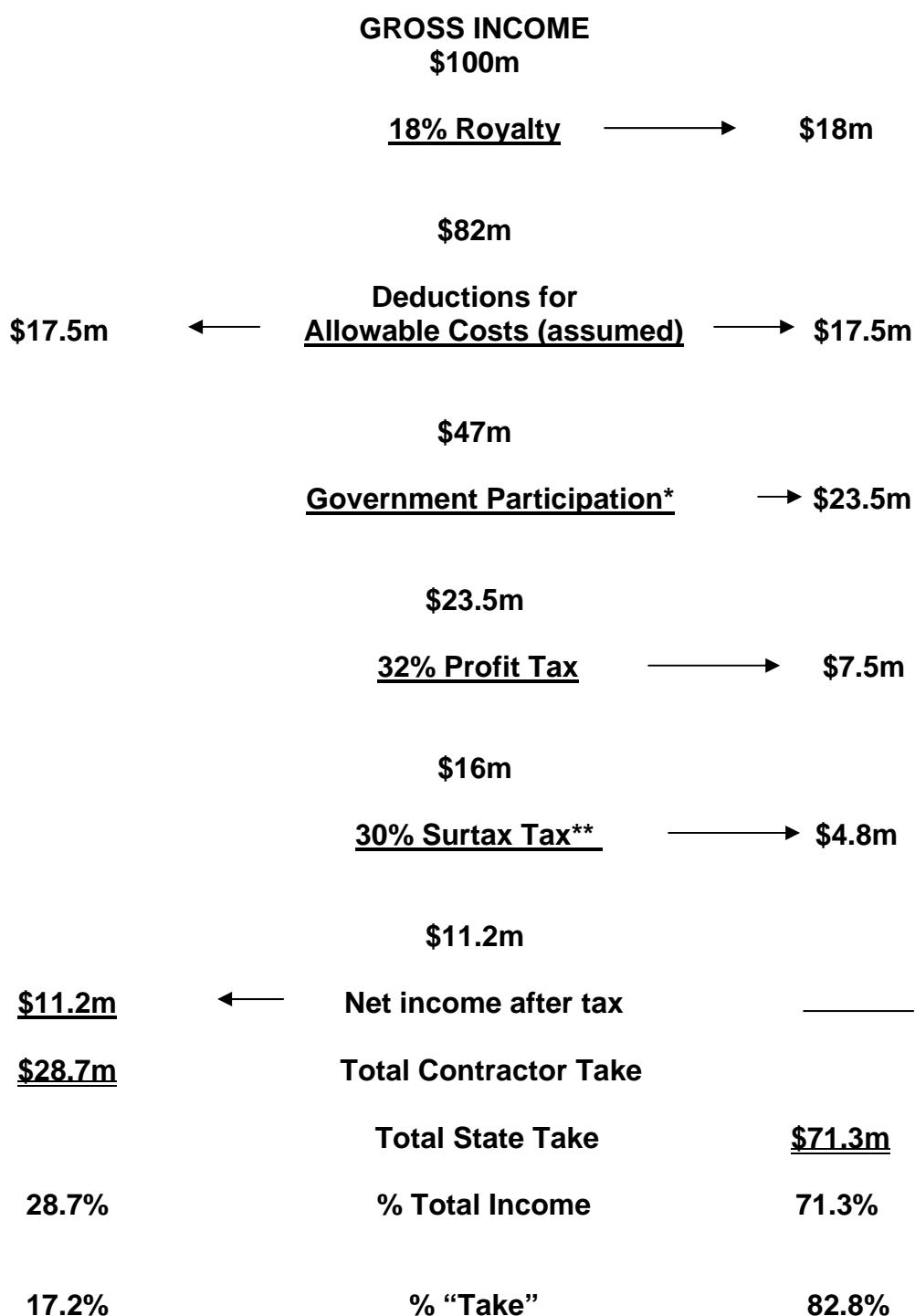


FLOW DIAGRAM FOR RUSSIA
APRIL 1993 – PETROCONSULTANTS & OTHER

Based on Gross Income of \$100m

Contractor Share

State Take



* = Government participation is optional but likely (50%)

** = Surtax deducted before payout.

Russia– 1993 Xavier Mines Technical Services Agreement

Contract Type: Production Sharing Contract

% Government Take: 50%

Core Taxes Used: 1) Profit Resource Split - 50%

1) After cost recovery, production sharing is split 50/50%

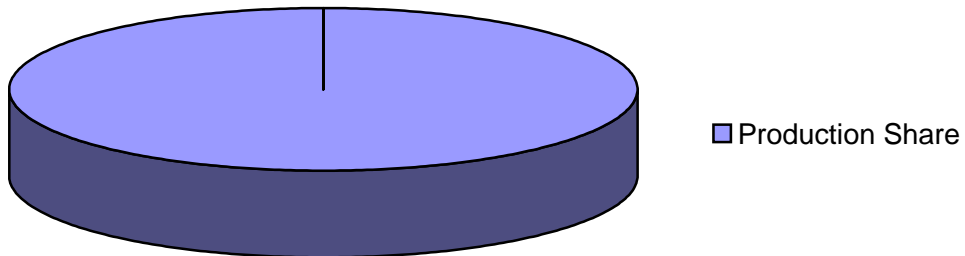
Other Taxes: Cost recovery limited to 60%

Interest credit allowed at 12%

Cost Accounting: All costs are expensed

Cost ring-fencing applies by contract

Russia - 1993 Xavier Mines Technical Services Agreements. Breakdown of Government Take



FLOW DIAGRAM FOR RUSSIA 1993
XAVIER MINES TECHNICAL SERVICES AGREEMENT

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$65m

Government Production Share → **\$32.5m**

\$32.5m

\$32.5m ← **Net income after tax**

\$67.5m **Total Contractor Take**

Total State Take **\$32.5m**

67.5% **% Total Income** **32.5%**

50% **% "Take"** **50%**

Russia – 1992 Elf Interneft Production Sharing Contract (PSC)

Contract Type: Production Sharing Contract

% Government Take: 67.7%

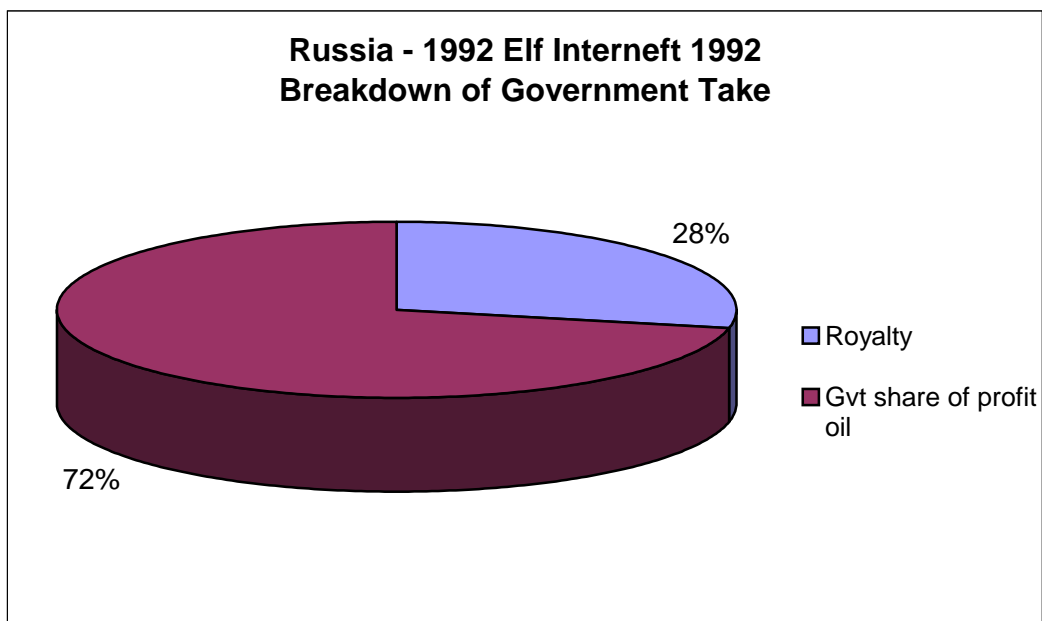
Core Taxes Used: 1) Royalty – 12.5%
2) Profit Resource Split - 60%

- 1) Royalty is calculated on gross revenues using a sliding scale based on production. The scale ranges between 12.5-15%.
- 2) After cost recovery and royalty payments, oil is split on a sliding scale depending on production. The government share varies between 60-85%

Other Taxes: Signature Bonuses
Production Bonuses
Surface Tax
Data Tax

Cost Accounting: All costs are expensed.

Cost ring-fencing applies by contract.

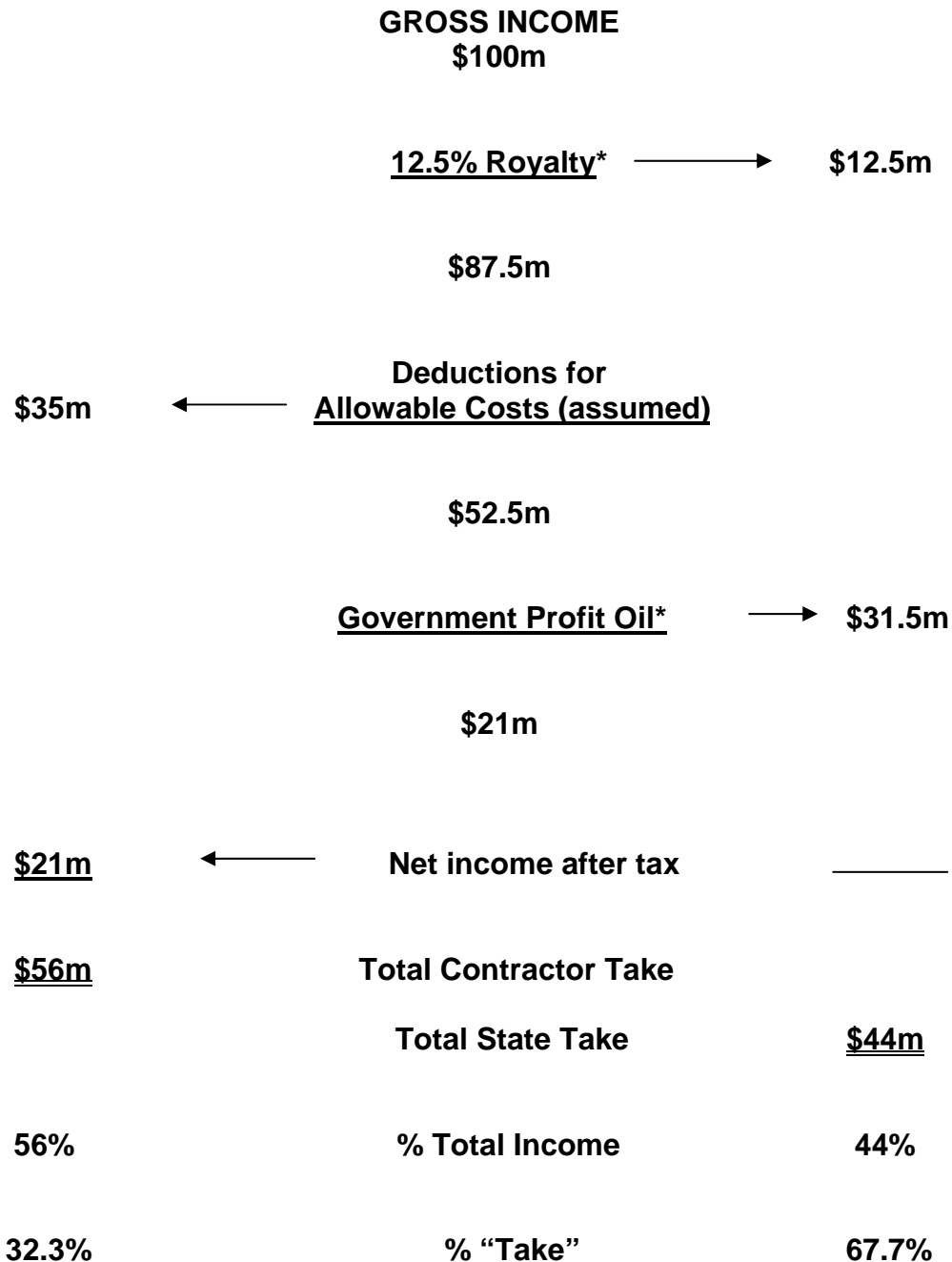


FLOW DIAGRAM FOR RUSSIA
ELF INTERNEFT PSC 1992

Based on Gross Income of \$100m

Contractor Share

State Take



* = Rates increase with level of resource production.

Russia – 1994 Astrahan Oblast Production Sharing Contract (PSC)
From Barrows AIPN Advisor

Contract Type: Production Sharing Contract

% Government Take: 62.9%

Core Taxes Used:

- 1) Royalty – 6%
- 2) Profit Resource Split - 40%
- 3) Corporate Income Tax – 32%

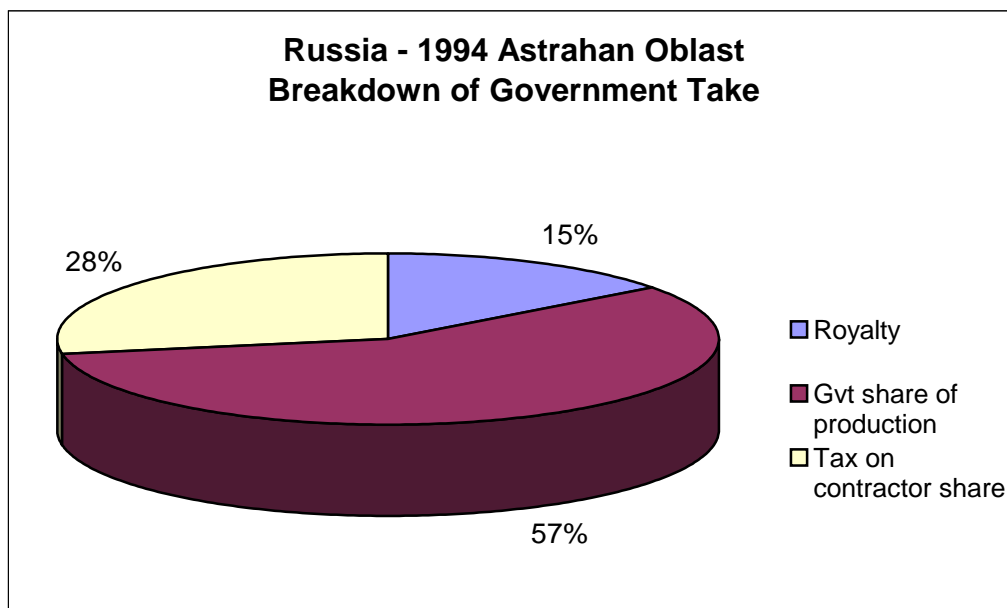
- 1) Royalty is calculated on gross revenues using a sliding scale based on corporate income tax (profit tax). The scale ranges between 6-10%.
- 2) After cost recovery and royalty payments, production sharing is split on a sliding scale depending internal rate of return after profit tax. The government share varies between 30-70%
- 3) Corporate income tax is calculated at 32% of net income after deduction of costs, royalties and resource split.

Other Taxes: Signature Bonuses
Discovery Bonuses

Rentals increase each year until a maximum rental of \$400/km² is due in the 5+ year

Cost recovery is limited to 90%

Cost Accounting: Cost ring-fencing applies by contract.

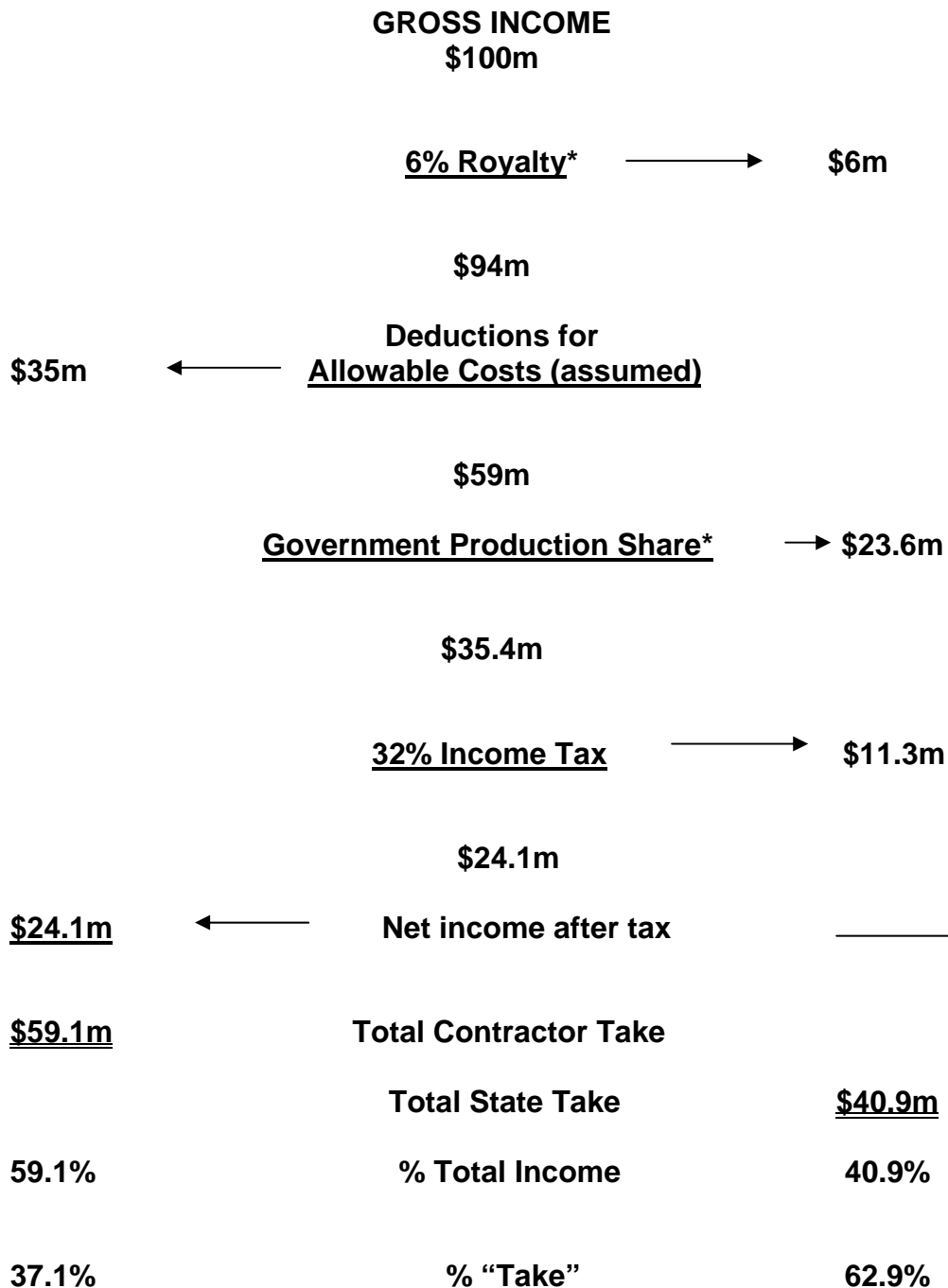


FLOW DIAGRAM FOR RUSSIA
ASTRAHAN OBLAST PSC 1994

Based on Gross Income of \$100m

Contractor Share

State Take



** = Rates increase with level of production profitability (measure taken after profit tax)*

Russia– 1994 Komi Republic

Contract Type: Production Sharing Contract

% Government Take: 59.8%

Core Taxes Used:

- 1) Royalty – 6%
- 2) Profit Resource Split - 35%
- 3) Corporate Income Tax – 32%

- 1) Royalty is calculated on gross revenues at 6%.
- 2) After cost recovery and royalty payments, production sharing is split on a sliding scale depending on internal rate of return after profit tax. The government share varies between 30-70%
- 3) Corporate income tax is calculated at 32% of net income after deduction of costs, royalties and resource split.

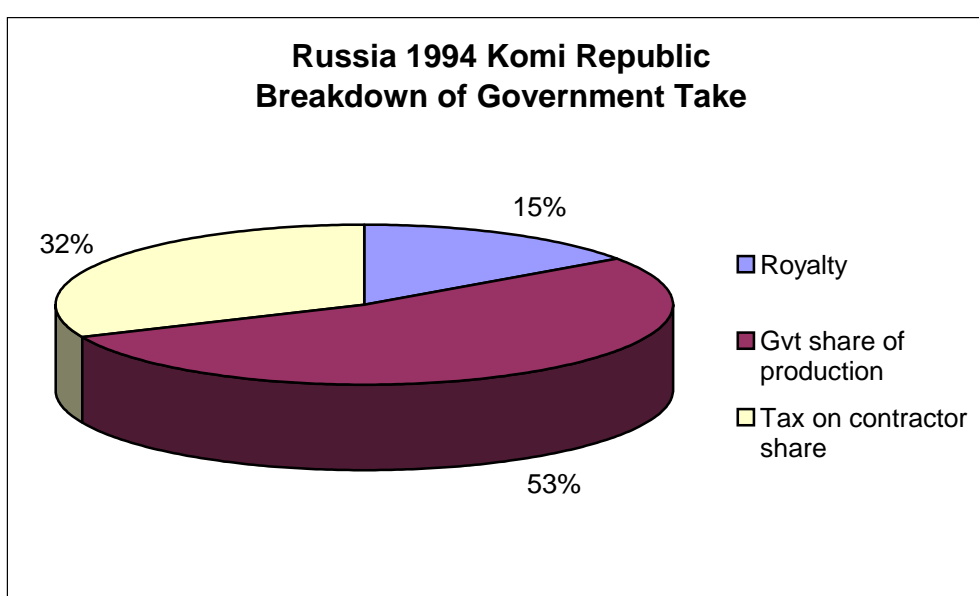
Other Taxes: Signature Bonuses
Production Bonuses

Rentals increase each year until a maximum rental of \$400/km² is due in the 5+ year

Cost recovery is limited to 75%

Cost Accounting: Depreciation of capital expenditure using a straight line method over 3 years

Cost ring-fencing applies by contract.



FLOW DIAGRAM FOR RUSSIA
DECEMBER 1994 – KOMI REPUBLIC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

6% Royalty → **\$6m**

\$94m

← **Deductions for**
Allowable Costs (assumed)

\$35m

\$59m

Government Production Share* → **\$20.6m**

\$38.4m

32% Profit Tax → **\$12.3m**

\$26.1m

← **Net income after tax**

\$26.1m

\$61.1m **Total Contractor Take**

Total State Take **\$38.9m**

61.1% **% Total Income** **38.9%**

40.2% **% “Take”** **59.8%**

**= Progressive scale based on profitability of production (measure taken after profit tax). 35% here.*

Russia– 1994 Sakhalin II

Contract Type: Production Sharing Contract

% Government Take: 69.1%

Core Taxes Used:

- 1) Royalty – 6%
- 2) Profit Resource Split - 50%
- 3) Corporate Income Tax – 32%

- 1) Royalty is calculated on gross revenues at 6%.
- 2) After cost recovery and royalty payments, production sharing is split on a sliding scale depending on pre tax internal rate of return. The government share varies between 10-70%
- 3) Corporate income tax is calculated at 32% of net income after deduction of costs, royalties and resource split.

Other Taxes: Commencement and development bonuses

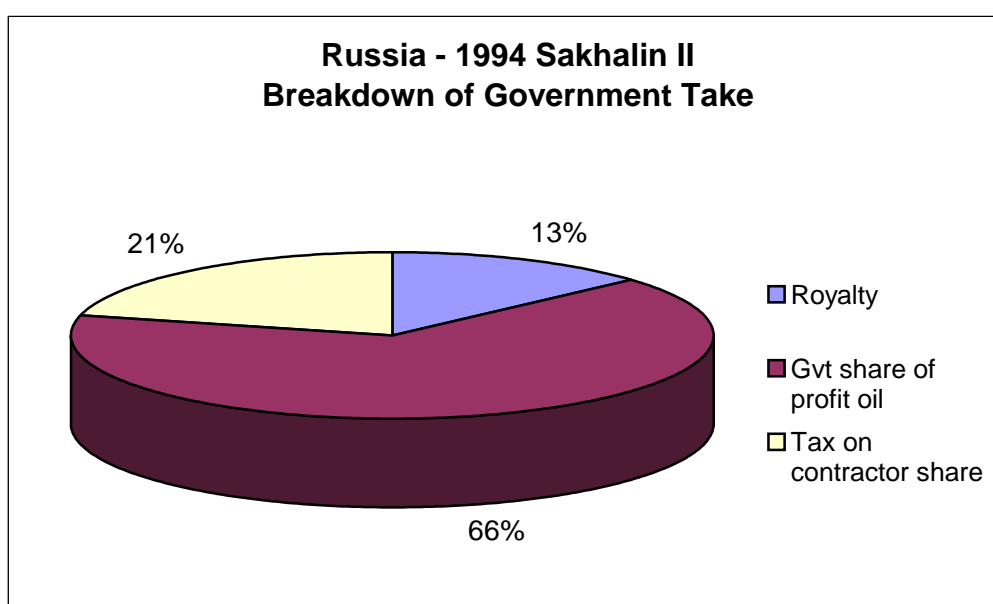
Rentals 1-2% of work program costs

Regional development fund donations

Cost recovery is 100% after royalty

Cost Accounting: Depreciation of capital expenditure using a straight line method over 3 years. All costs are expensed

Cost ring-fencing applies by contract



FLOW DIAGRAM FOR RUSSIA
JUNE 1994 – SAKHALIN II

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

6% Royalty \longrightarrow **\$6m**

\$94m

\$35m \longleftarrow **Deductions for**
Allowable Costs (assumed)

\$59m

Government Production Share* \longrightarrow **\$29.5m**

\$29.5m

32% Profit Tax \longrightarrow **\$9.4m**

\$20.1m

\$20.1m \longleftarrow **Net income after tax** \longrightarrow

\$55.1m **Total Contractor Take**

Total State Take **\$44.9m**

55.1% **% Total Income** **44.9%**

30.9% **% “Take”** **69.1%**

** = Progressive scale based on profitability of production (measure taken after profit tax). 50% here.*

Russia – Mid 1990s Amoco – Priobskoe Production Sharing Contract (PSC)

Contract Type: Production Sharing Contract

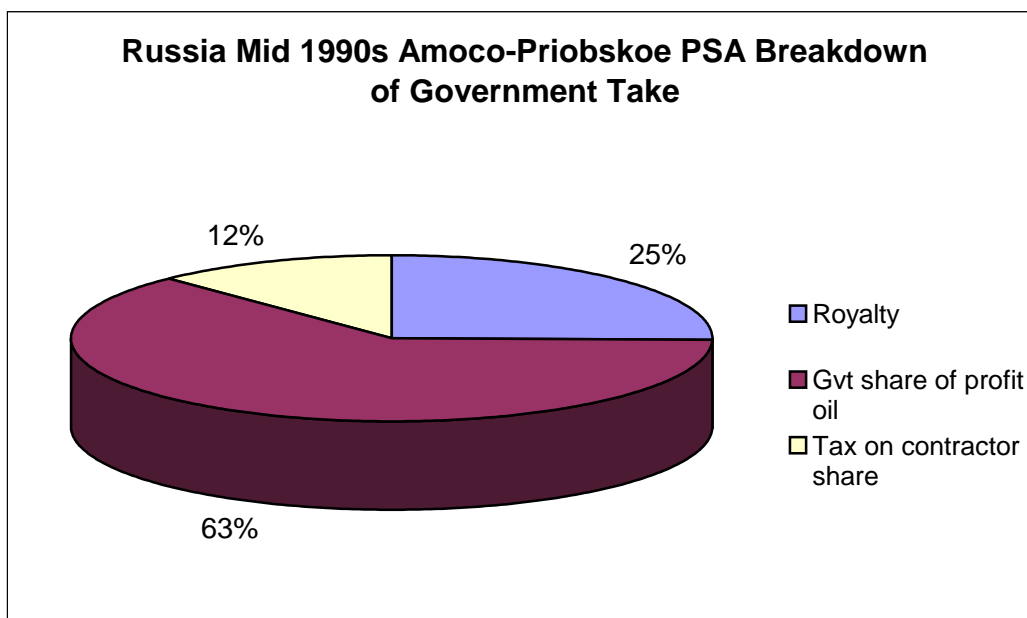
% Government Take: 79.3%

Core Taxes Used:

- 1) Royalty – 13%
- 2) Profit Resource Split - 62%
- 3) Corporate Income Tax – 32%

- 1) Royalty is calculated on gross revenues at 13%
- 2) After cost recovery and royalty payments resources are split. This actually consists of a production sharing split 88/12% in favour of the contractor and a 50% government participation. For the sake of the “take” calculation these two can be combined. In large projects Government Participation often funded by Russian and/or Foreign investors, or Government could opt out of participation.
- 3) Corporate income tax is calculated at 32% of net income after deduction of costs, royalties and resource split.

Other Taxes: Local content required of 70%

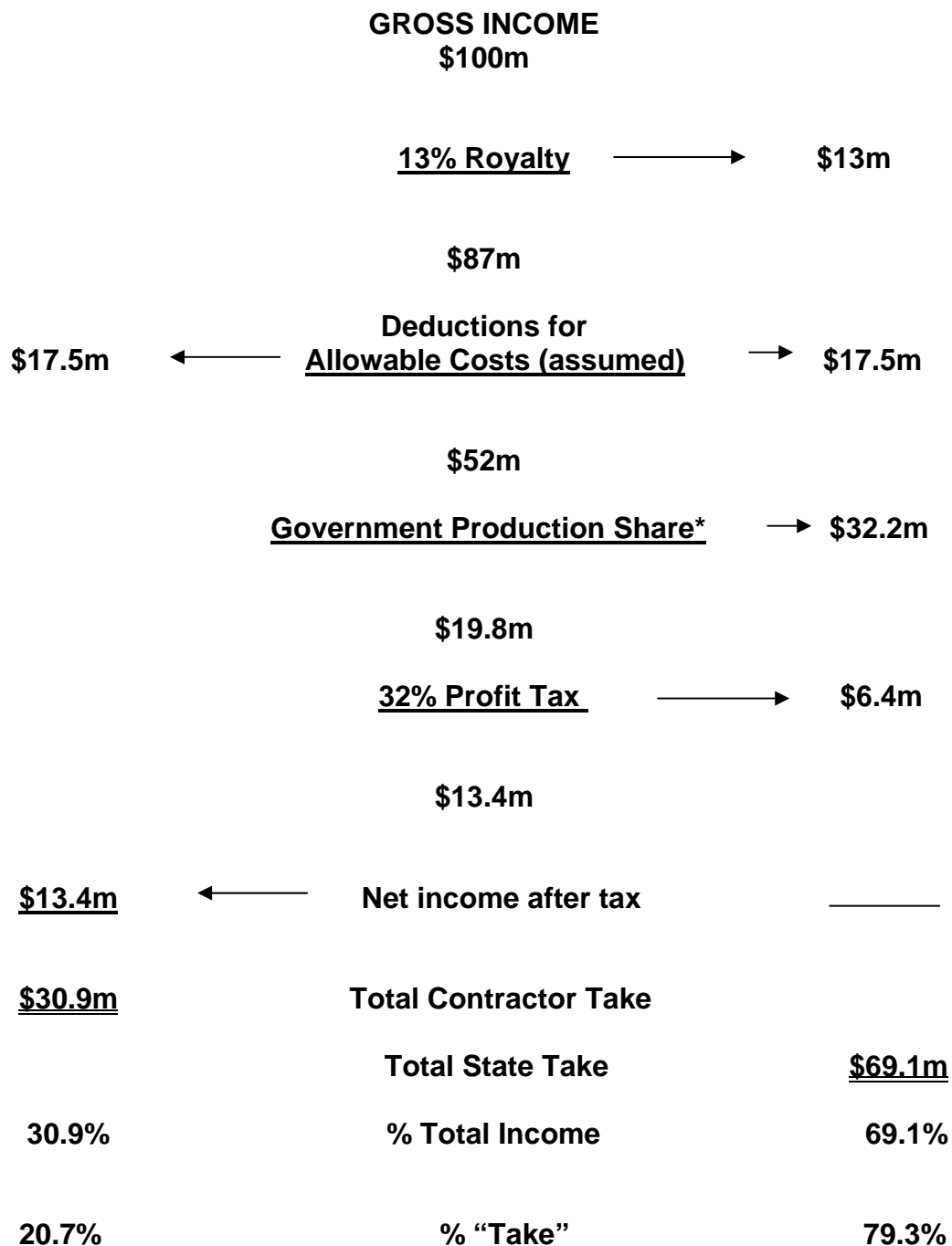


FLOW DIAGRAM FOR RUSSIA
MID-1990s AMOCO-PRIOBSKOE PSA

Based on Gross Income of \$100m

Contractor Share

State Take



** = 50% Government Participation and further 12% share taken of Contractor element. In large projects Government Participation often funded by Russian and/or Foreign investors, or Government could opt out of participation.*

**Trinidad & Tobago – 1998 ARCO/Petrobras/Union Texas Offshore
Production Sharing Contract (PSC)**

Contract Type: Production Sharing Contract

% Government Take: 52%

Core Taxes Used: 1) Profit Gas Share - 52%

- 1) After contractor's cost recovery, gas and oil is split on a sliding scale depending on price. The government share of gas varies between 50-62% and oil varied between 62-74%.

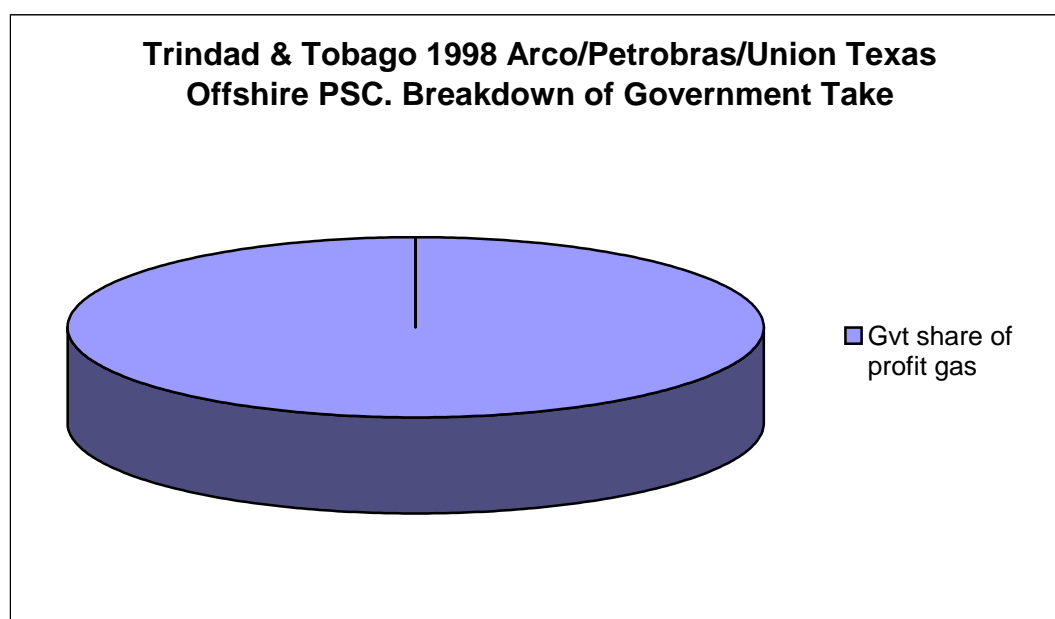
Other Taxes: Signature Bonuses
Production Bonuses
Bonuses for training, research & development, technical assistance and administrative fee

Annual rentals \$1.25/hectare in 1st year; the \$1.5, \$1.75, \$2.0, \$2.25, \$2.50, \$2.75, \$3.0, \$3.25, \$3.50 then +6% per year

Cost oil restricted to 55-65% for gas and 45-55% for oil

Cost Accounting: Development costs are depreciated at 40% during the first year and on a straight line basis over the following 3 years. Exploration costs are written off as expenditure.

Cost ring-fencing applies by contract.



FLOW DIAGRAM FOR TRINIDAD AND TOBAGO
ARCO/PETROBRAS/UNION/TEXAS OFFSHORE 1998

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

Deductions for
Allowable Costs (assumed)*

← \$35m

\$65m

52% Government Share
of Profit Gas → **\$33.8m**

← **\$31.2m** Net income after tax

\$66.2m Total Contractor Take

Total State Take **\$33.8mm**

66.2% % Total Income 33.8%

48% % "Take" 52%

* Cost recovery restricted to 45-55% oil and 55%-65% gas

Trinidad & Tobago – 1996 BHP/Elf Offshore Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 52%

Core Taxes Used: 1) Profit Gas Share - 52%

- 1) After contractor's cost recovery, gas and oil is split on a sliding scale depending on price. The government share of gas varies between 50-65% and oil varied between 50-80%.

Other Taxes: Production Bonuses

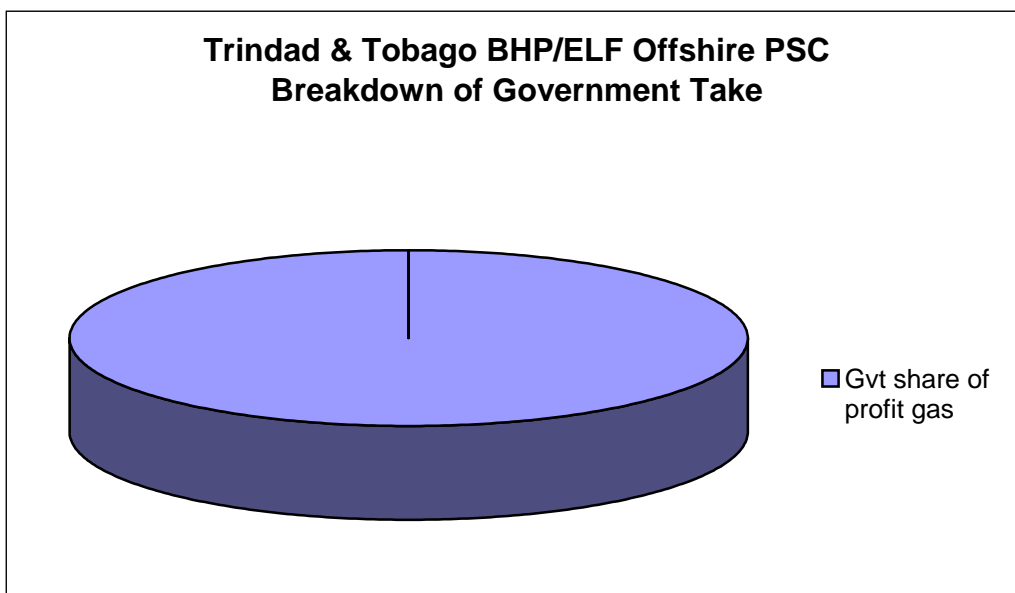
Bonuses for training, research & development, technical assistance and administrative fee

Annual rentals \$1.25/hectare in 1st year; the \$1.5, \$1.75, \$2.0, \$2.25, \$2.50 then +6% per year

Cost oil restricted to 50% for gas and 35% for oil

Cost Accounting: Development costs are depreciated on a straight line basis over 5 years. Exploration costs are written off as expenditure.

Cost ring-fencing applies by contract.

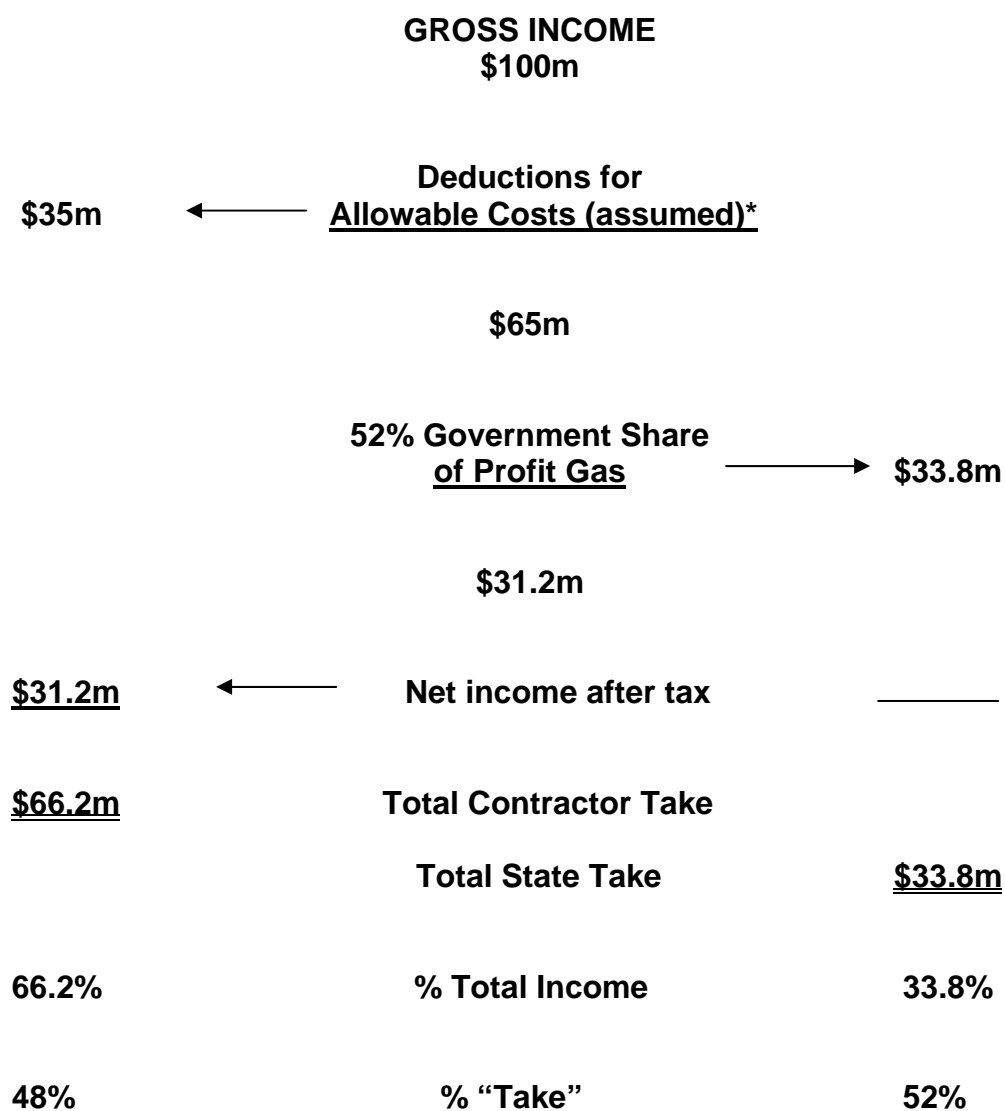


FLOW DIAGRAM FOR TRINIDAD AND TOBAGO
BHP/Elf Offshore PSC 1996

Based on Gross Income of \$100m

Contractor Share

State Take



* Cost oil restricted to 35% oil and 50% gas

Trinidad & Tobago – 1996 BHP/Talisman Offshore Production Sharing Contract (PSC)

Contract Type: Production Sharing Contract

% Government Take: 52%

Core Taxes Used: 1) Profit Gas Share - 52%

- 1) After contractor's cost recovery, gas and oil is split on a sliding scale depending on price. The government share of gas varies between 50-65% and oil varied between 50-80%.

Other Taxes: Production Bonuses

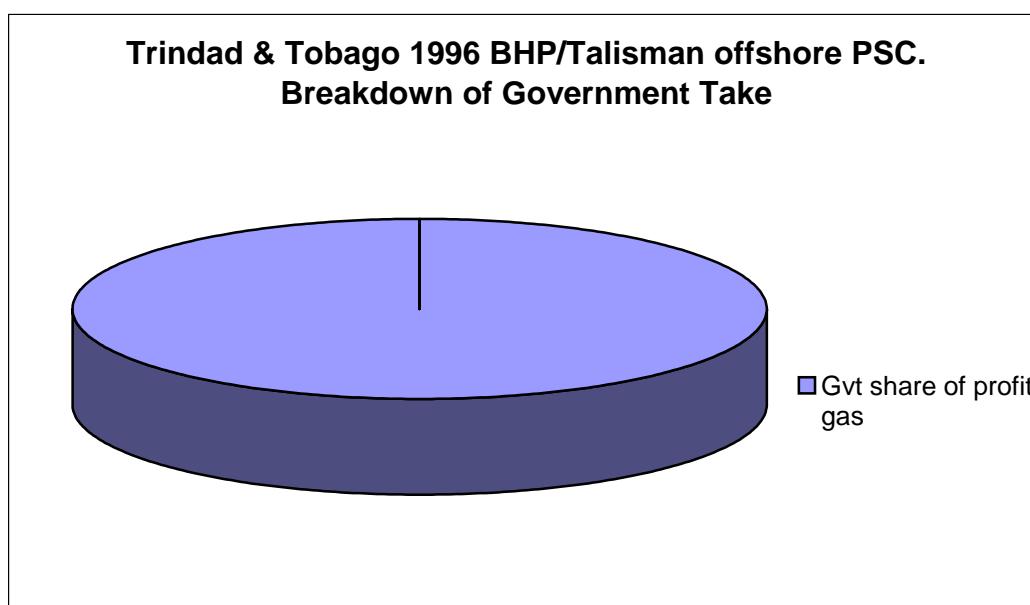
Bonuses for training, research & development, technical assistance and administrative fee

Annual rentals \$1.25/hectare in 1st year; the \$1.5, \$1.75, \$2.0, \$2.25, \$2.50 then +6% per year

Cost oil restricted to 50% for gas and 50% for oil

Cost Accounting: Development costs are depreciated at 40% during the first year and on a straight line basis over the following 3 years. Exploration costs are written off as expenditure.

Cost ring-fencing applies by contract.



Based on Gross Income of \$100m		
<u>Contractor Share</u>		<u>State Take</u>
	GROSS INCOME \$100m	
	Deductions for <u>Allowable Costs (assumed)*</u>	
\$35m	←	
	\$65m	
	52% Government Share <u>of Profit Gas</u>	→
	\$31.2m	\$33.8m
<u>\$31.2m</u>	←	
	Net income after tax	
<u>\$66.2m</u>		
	Total Contractor Take	
	Total State Take	<u>\$33.8m</u>
66.2%	Total Income	33.8%
48%	% "Take"	52%

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Trinidad & Tobago – 1999 Example Operating Lease

Contract Type: Royalty Tax System

% Government Take: 78%

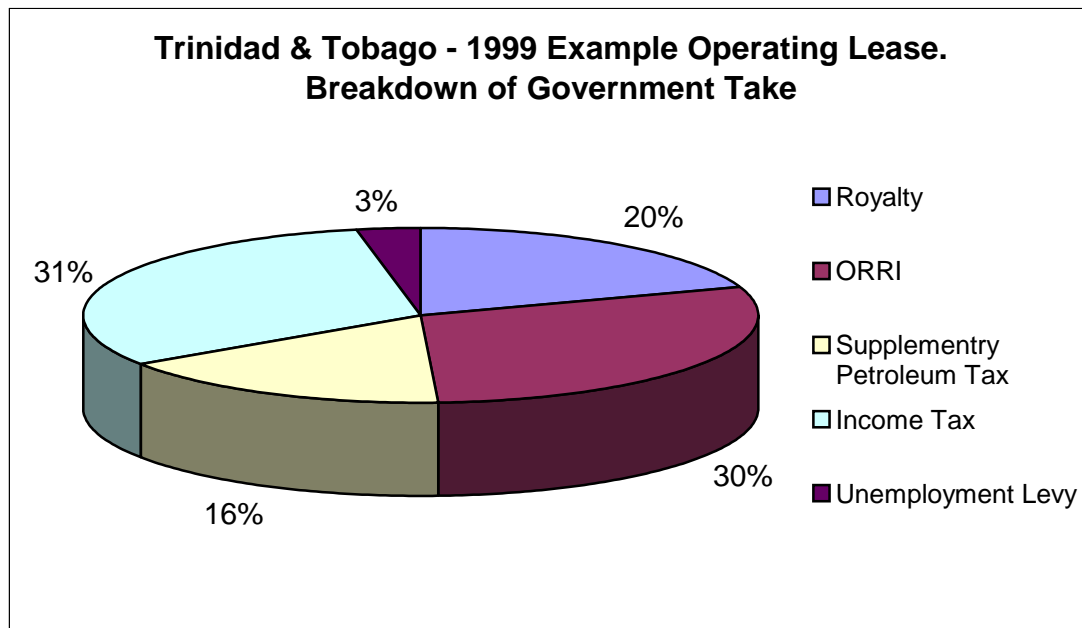
Core Taxes Used: 1) Royalty – 33.2% effective rate
2) Corporate Income Taxes– 55%

- 1) This contract contains three royalties. The core royalty (10%) and the Petrotrin overriding royalty (ORRI) that are calculated on gross revenues. ORRI is calculated on a sliding scale based upon production (between 8-44%). A third royalty, Supplemental Petroleum Tax, has the form of a price sensitive sliding scale between 0-21%, royalties and investment allowances are deductible against this tax.
- 2) Corporate income taxes comprise of Petroleum profits tax (50%), and unemployment levy (5%), which are both calculated on net income after deduction of costs and royalties.

Other Taxes: Dividend Tax 10%

Cost Accounting: Depreciation on assets is calculated as 40% in the year of purchase and straight line depreciation 20% per annum thereafter.

Ring-fencing of costs applies by contract.

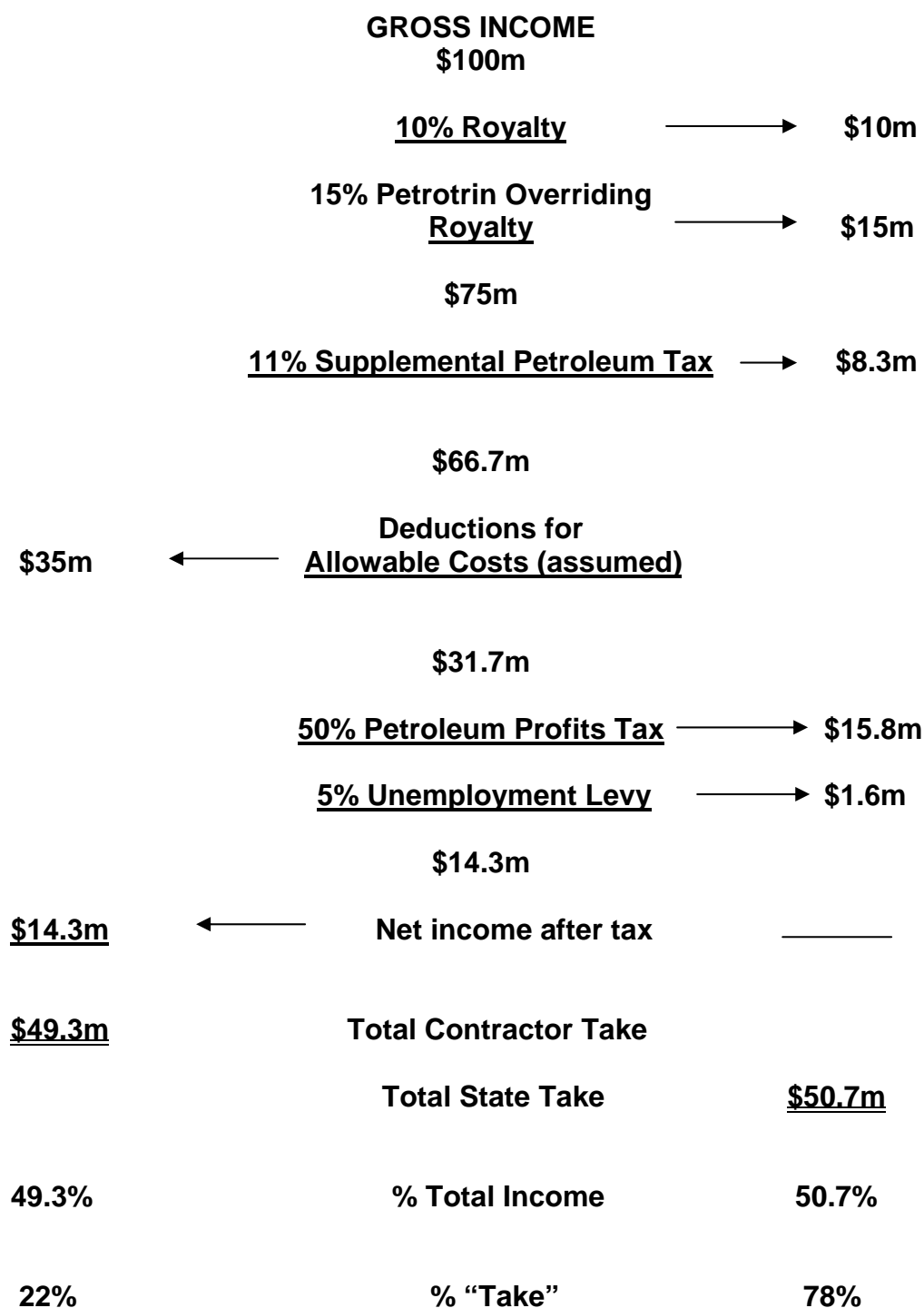


FLOW DIAGRAM FOR TRINIDAD AND TOBAGO
EXAMPLE OPERATING LEASE 1999

Based on Gross Income of \$100m

Contractor Share

State Take



Trinidad & Tobago – 1993 Royalty/Tax Unocal Terms

Contract Type: Royalty Tax System

% Government Take: 78.2% Gas (73% Oil)

Core Taxes Used: 1) Royalty – 33.4% effective rate
2) Corporate Income Taxes– 55%

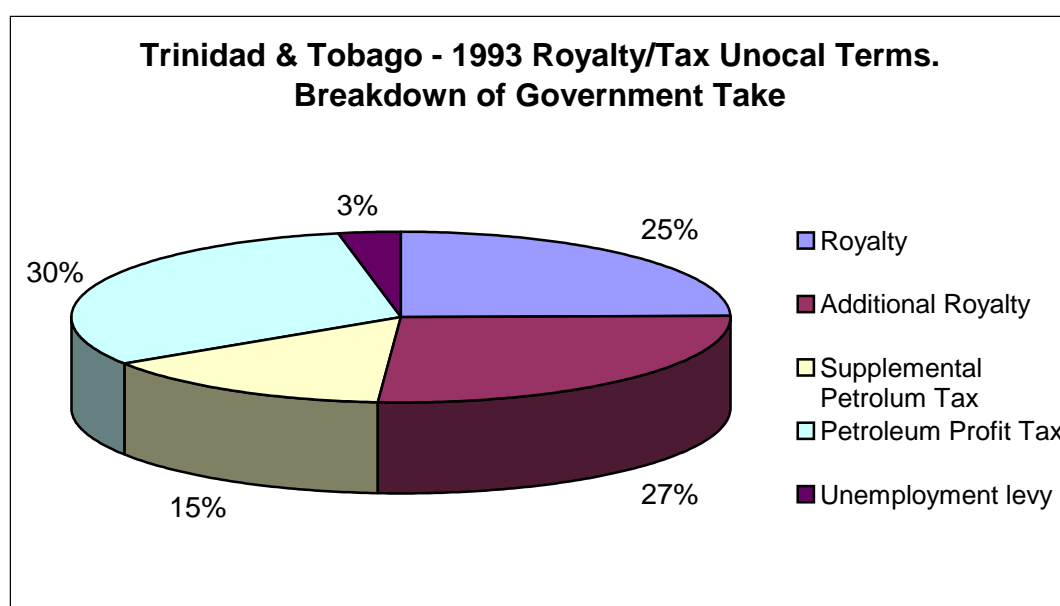
- 1) This contract contains three royalties. The core royalty (12.5%) and additional royalty are calculated on gross revenues. The additional royalty is fixed for gas at 13.5% and but has a sliding scale for oil, based on production (between 2-10%). A third royalty, Supplemental Petroleum Tax, has the form of a price sensitive sliding scale between 0-36%, other royalties and investment allowances are deductible against this tax.
- 2) Corporate income taxes comprise of Petroleum profits tax (50%), and unemployment levy (5%), which are both calculated on net income after deduction of costs and royalties.

Other Taxes: Bonuses for training, research & development and technical equipment

Annual rentals \$1.25/hectare in 1st year; the \$1.5, \$1.75, \$2.0, \$2.25, \$2.50 then +6% per year

Cost Accounting: Depreciation on assets is calculated as 40% in the year of purchase and straight line depreciation 20% per annum thereafter.

Ring-fencing of costs applies by contract.



FLOW DIAGRAM FOR TRINIDAD & TOBAGO
1993 ROYALTY/TAX UNOCAL TERMS

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty \longrightarrow **\$12.5m**

13.5% Additional Royalty \longrightarrow **\$13.5m**

\$74m

Supplemental Petroleum Tax \longrightarrow **\$7.4m**

\$66.6m

\$35m \longleftarrow **Deductions for**
Allowable Costs (assumed)

\$31.6m

50% Petroleum Profits Tax \longrightarrow **\$15.8m**

5% Unemployment Levy \longrightarrow **\$1.6m**

\$14.2m \longleftarrow **Net income after tax** \longrightarrow

\$49.2m **Total Contractor Take**

Total State Take **\$50.8m**

49.2% **% Total Income** **50.8%**

21.8% **% "Take"** **78.2%**

United States - Alaska Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 57.7%

Core Taxes Used: 1) Royalty – 12.5%
2) Corporate Income Taxes– 47.5%

- 1) Royalties are calculated on gross revenues, with typical values of 12.5%. Some royalty reduction may be possible
- 2) Corporate income taxes comprise of Federal Income Tax (35%), and State Income Tax (9.4%), which are calculated on net income after deduction of costs and royalties. Additional taxes; Federal Environmental Tax (0.12%) and Oil Spill Contingency Tax (\$0.05/BBL up to \$50MM then \$0.03/BBL) have been included in this figure due to the nature and timing of these deduction.

Other Taxes: Bonus \$5/acre minimum
Rentals \$3/acre up to \$5/acre – over a period of five years

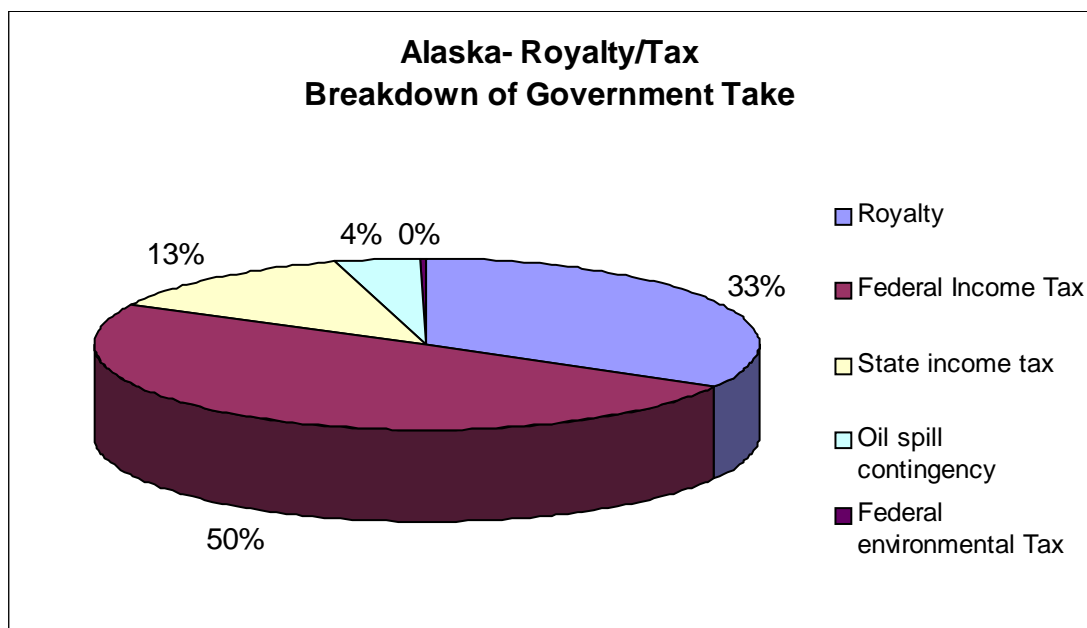
Severance Tax, which is the higher of either 12.25% during the first 5 years, raising to 15% thereafter or \$0.8/BBL of production.

Property Ad Valorem Tax 2%

Investment Tax Credits (limited to 2% of taxable income).

Cost Accounting: Capital expenditure is capitalised and depreciated.

No Ring-fencing of costs.



FLOW DIAGRAM FOR UNITED STATES - ALASKA **ROYALTY/TAX**

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty

—————→ **\$12.5m**

\$87.5m

Deductions for
Allowable Costs (assumed)

\$35m

←————

\$52.5m

35% Federal Income Tax

—————→ **\$18.4m**

9.4% State Income Tax

—————→ **\$4.9m**

Oil Spill Contingency Tax

—————→ **\$1.6m**

Federal Environmental Tax

—————→ **\$0.1m**

\$27.5m

\$27.5m

←————

Net income after tax

—————

\$62.5m

Total Contractor Take

Total State Take

\$37.5m

62.5%

% Total Income

37.5%

42.3%

% “Take”

57.7%

United States– Texas Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 59.1%

Core Taxes Used: 1) Royalty – 24%
2) Corporate Income Taxes– 35.12%

- 1) Royalty is calculated on gross revenues, and varies between 16.67-25%
- 2) Corporate income taxes comprise of Federal Income Tax (35%) and the Federal Environmental Tax (0.12%), which are calculated on net income after deduction of costs and royalties.

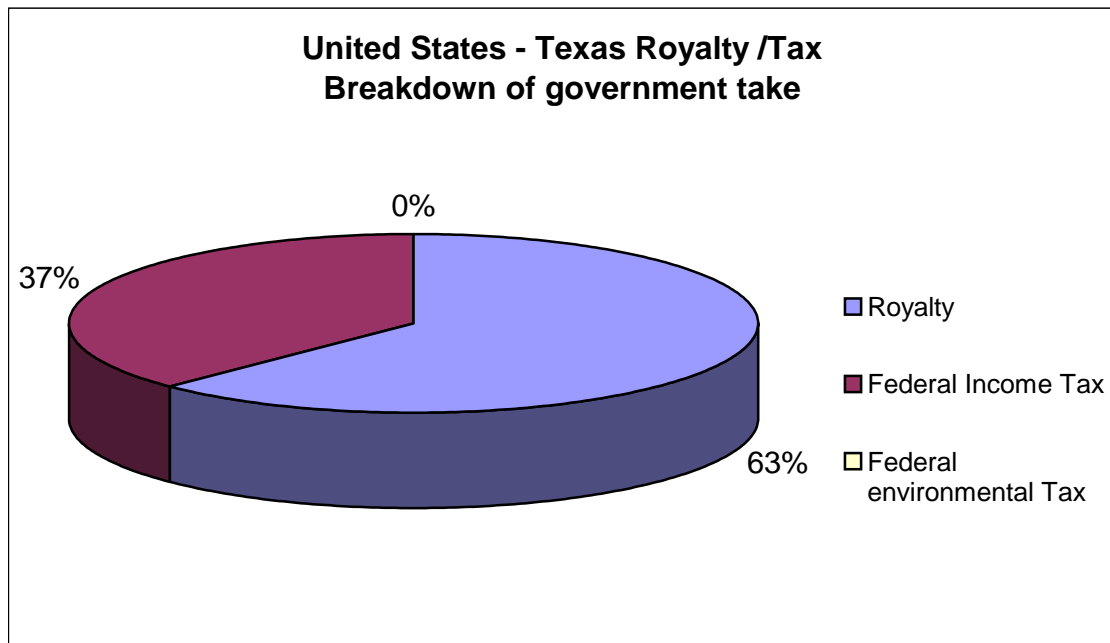
Other Taxes: Bonus of approximately \$75/acre (various)
Rentals \$2-3/Acre

Severance Tax 7.5% for gas and 4.6% oil

Ad Valorem Tax 1.5%- 5% depending on county

Cost Accounting: Capital expenditure is capitalised and depreciated.

No Ring-fencing of costs.



FLOW DIAGRAM FOR UNITED STATES - TEXAS
ROYALTY/TAX

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

24% Royalty

—————→ **\$24m**

\$76m

Deductions for
Allowable Costs (assumed)

\$35m

←————

\$41m

35% Profit Tax

—————→ **\$14.3m**

Federal Environmental Tax

—————→ **\$0.1m**

\$26.6m

\$26.6m

←————

Net income after tax

—————

\$61.6m

Total Contractor Take

Total State Take

\$38.4m

61.6%

% Total Income

38.4%

40.9%

% “Take”

59.1%

United States – Wyoming Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 55.1%

Core Taxes Used: 1) Royalty – 20%
2) Corporate Income Taxes– 35.12%

- 1) Royalty is calculated on gross revenues, and varies between 12.5%-25%. Some royalty reduction is possible below \$22/BBL.
- 2) Corporate income taxes comprise of Federal Income Tax (35%) and the Federal Environmental Tax (0.12%), which are calculated on net income after deduction of costs and royalties.

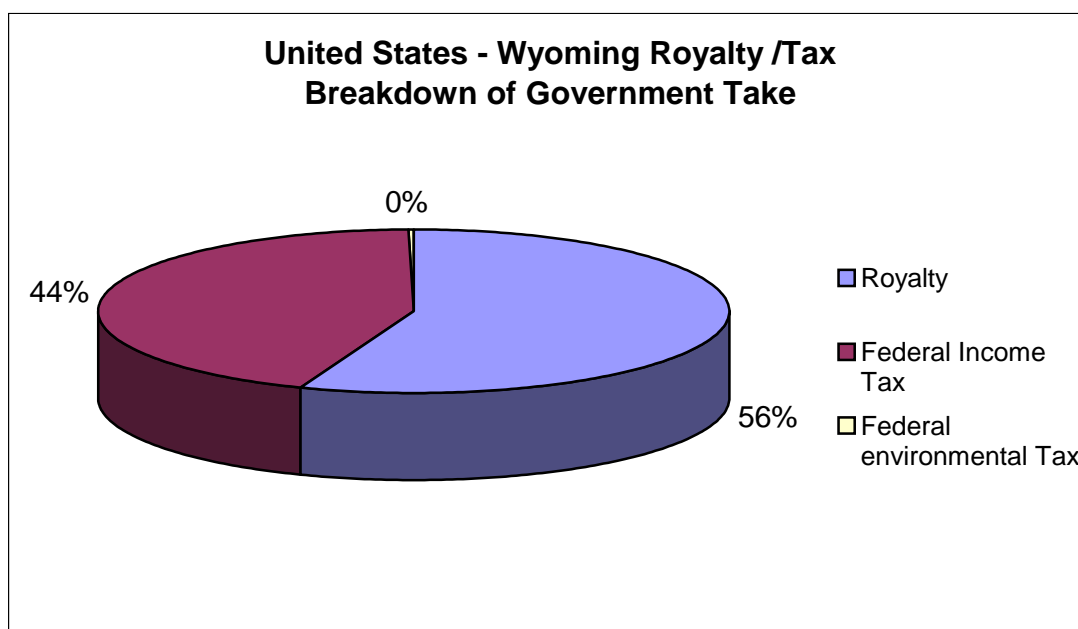
Other Taxes: Bonus of approximately \$75/acre (various)
Rentals \$1-2/Acre with production and can be offset against royalties

Severance Tax 6.0% for oil (4.0% for stripper wells)

Ad Valorem Tax 6.9% of assessed value of equipment at book value

Cost Accounting: Capital expenditure is capitalised and depreciated.

No Ring-fencing of costs.



**FLOW DIAGRAM FOR UNITED STATES - WYOMING
ROYALTY/TAX**

Based on Gross Income of \$100m

Contractor Share

State Take

**GROSS INCOME
\$100m**

20% Royalty \longrightarrow **\$20m**

\$80m

\$35m \longleftarrow **Deductions for
Allowable Costs (assumed)**

\$45m

35% Profit Tax \longrightarrow **\$15.7m**

Federal Environmental Tax \longrightarrow **\$0.1m**

\$29.2m

\$29.2m \longleftarrow **Net income after tax** \longrightarrow

\$64.2m **Total Contractor Take**

Total State Take **\$35.8m**

64.2% **% Total Income** **35.8%**

44.9% **% "Take"** **55.1%**

Venezuela – 1996 Risk Service Agreements

Contract Type: Risk Service Agreement

% Government Take: 90.4%

Core Taxes Used:

- 1) Royalty – 16.7%
- 2) Surtax (“PEG”) – 50%
- 3) Corporate Income Tax – 67.7%
- 4) Government Participation – 20%

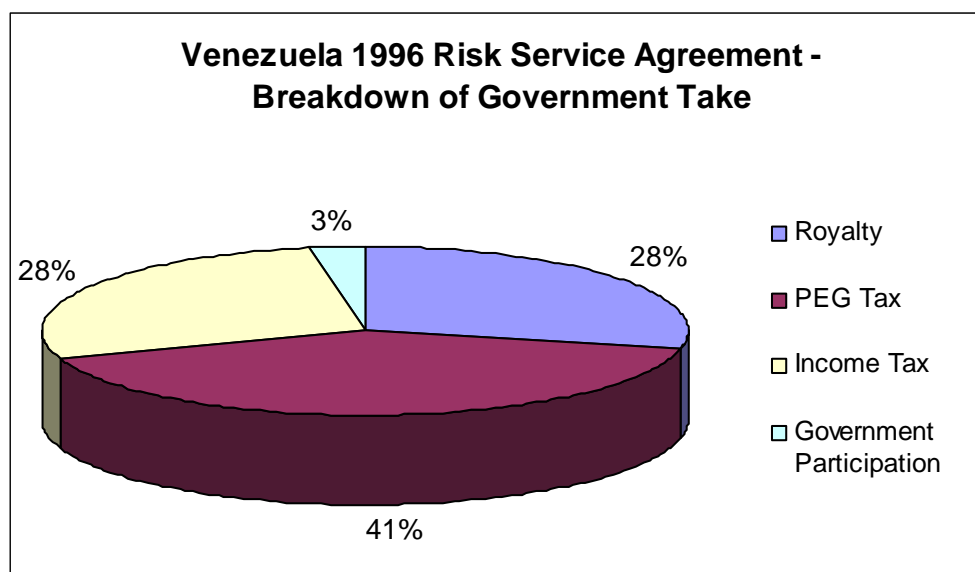
- 1) The level of the Royalty is calculated on a sliding scale basis based on the level of pre-tax profits.
- 2) Surtax (“PEG”) is a sliding-scale additional profits tax calculated on profit levels before deduction of income tax. Scale is from 0-50%.
- 3) Corporate income tax is levied at a rate of 67.7% on net income after deduction of costs, royalties and PEG.
- 4) Government Participation – sliding scale from 0-35%.

Other Taxes: Signature Bonuses (bonuses themselves are biddable, contractors must also pay to make bid).
Data Package Fees

VAT – 16% (zero for exports)

Investment Tax Credits (limited to 2% of taxable income).

Cost Accounting: Exploration and Development Drilling Capitalised and depreciated. Dry Well expenditure expensed.
Ring-fencing of costs applies by contract.

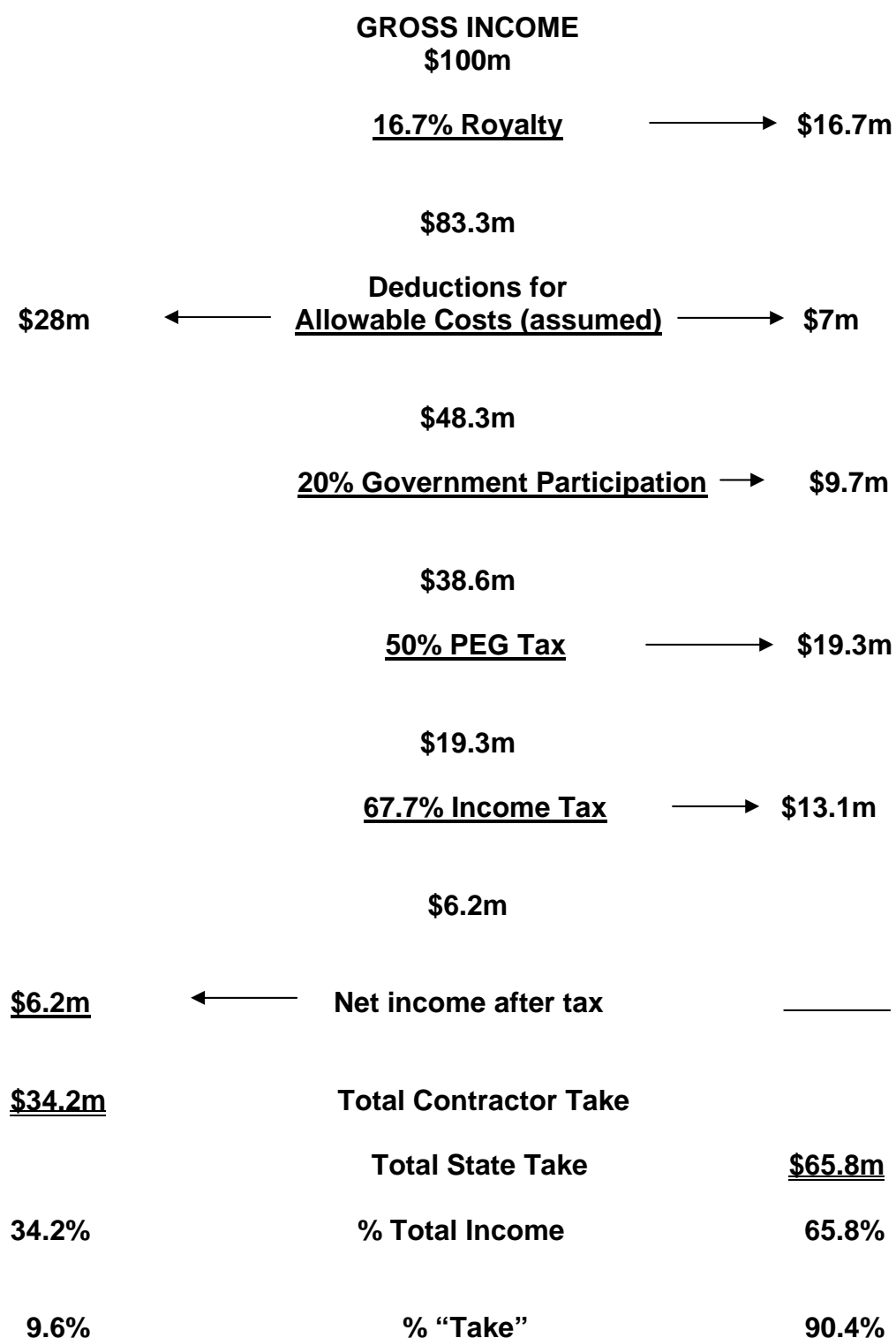


**FLOW DIAGRAM FOR VENEZUELA
1996 RISK SERVICE AGREEMENTS**

Based on Gross Income of \$100m

Contractor Share

State Take



Appendix 4 – Overview of Non-G1 Fiscal Systems

System	Type^	Take (%)	Royalty (%)	Income Tax (%)	Surtax (%)	Government Split* (%)	Cost Recovery Limits (%)	Ring-fencing? (Y/N)	Sliding scale Used?
Abu Dhabi 1980s	RT	89.4	16	65	-	60	100	Y	Royalty & Income Tax
Algeria 1980s Partnership Contract	RT	90.4	16.25	75	-	51	100	Y	No
Algeria 1996 PSC Example 1	PSC	94.6	-	-	-	94.6	100	Y	Gvt. Split
Algeria PSC Example 2	PSC	96.3	-	-	-	96.3	100	Y	Gvt. Split
Algeria 1996 PSC EOR Project	PSC	81.2	12.5	-	-	76.8	100	Y	No
Algeria 1997 Petronas PSC	PSC	88.1	12.5	-	-	85.3	100	Y	Gvt. Split
Algeria 1997 BP PSC	PSC	86.2	10	-	-	83.8	100	Y	Gvt. Split
Angola 1989 Model PSC	PSC	90	-	50	-	80	50	Y	Gvt. Split
Angola Mid 1990s Offshore PSC	PSC	80	-	-	-	80	50	Y	Gvt. Split
Angola Block 16 PSC	PSC	68	-	-	-	68	55	Y	No
Angola Ultra Deepwater PSC	PSC	72.5	-	50	-	45	55	Y	Gvt. Split
Angola post 1982 Cabinda- Chevron	RT	92.9	20	65.75	70	-	100	Y	Gvt. Split
Azerbaijan Offshore PSC	PSC	77.5	-	25	-	70	100	Y	Gvt. Split
Azerbaijan 1994 Aloc-PC Amoco	PSC	69.6	-	25	-	59.5	100	Y	Gvt. Split
Azerbaijan 1995 EDPSA II	PSC	75	-	-	-	75	100	Y	Gvt. Split
Bangladesh 1989 PSC	PSC	80	-	-	-	80	35	Y	Gvt. Split
Bangladesh 1997 PSC	PSC	70	-	-	-	70	45	Y	Gvt. Split
Brunei 1990s Royalty/Tax	RT	83.6	12.5	55	5	50	100	N	No
Canada Royalty/Tax 3 rd Tier Oil	RT	67.7	15	43.5	4	-	100	N	Royalty
Canada Newfoundland Royalty/Tax	RT	60.6	5	42	4	20	100	Y	Royalty & Gvt. Split
China 1990s Offshore PSC	PSC	73.6	8	33	10	50	50	N	Royalty & Gvt. Split
China 1994/95 Deepwater PSC	PSC	64.6	8	30	10	36	50	N	Royalty & Gvt. Split
China Onshore PSC	PSC	75.8	15	33	10	50	60	Y	Royalty & Gvt. Split
China 1997 EOR Projecy	PSC	83.5	15	33	-	50	70	Y	Royalty
Denmark 1997 Royalty/Tax	RT	65.6	-	34	70	20	100	Y	No
Egypt 1974 Deminex/Shell/BP "SUOCO"	PSC	80	-	-	-	80	40	Y	No
Egypt 1974 Deminex/Shell/BP "DEOCO"	PSC	82.5	-	-	-	82.5	40	Y	No

System	Type^	Take (%)	Royalty (%)	Income Tax (%)	Surtax (%)	Government Split* (%)	Cost Recovery Limits (%)	Ring-fencing? (Y/N)	Sliding scale Used?
Egypt Norsk Hydro-Kufpec-Ras El Hekma	PSC	78	-	-	-	78	40	Y	No
Egypt 1984 Typical PSC	PSC	82.5	-	-	-	82.5	30	Y	Gvt. Split
Egypt 1986 Typical PSC	PSC	85	-	-	-	85	30	Y	Gvt. Split
Egypt 1989 Amoco PSC	PSC	80	-	-	-	80	40	Y	Gvt. Split
Egypt 1994 Vintage (West Desert) PSC	PSC	80	-	-	-	80	30	Y	Gvt. Split
Egypt 1994 Vintage (East Desert) PSC	PSC	80	-	-	-	80	30	Y	Gvt. Split
Egypt 1994 Vintage (Suez) PSC	PSC	80	-	-	-	80	30	Y	Gvt. Split
Egypt 1994 Vintage (Red Sea) PSC	PSC	65	-	-	-	65	30	Y	Gvt. Split
Egypt 1994 Vintage (Deepwater) PSC	PSC	70	-	-	-	70	30	Y	Gvt. Split
Egypt 1997 Alliance International PSC	PSC	81	-	-	-	81	35	Y	Gvt. Split
Georgia 1997 EOR PSC	PSC	77	5	17	-	40	50	Y	No
Holland 1990s Offshore Royalty/Tax	RT	83.5	10	35	-	70	100	N	Gvt. Split
India Late 1980s Various PSCs	PSC	79	-	50	-	58	100	Y	Gvt. Split
India 1987 Chevron	PSC	80.5	-	50	-	61	100	Y	Gvt. Split
India 1987 IP Bermuda	PSC	82	-	50	-	64	100	Y	Gvt. Split
India 1988 Amoco	PSC	83.5	-	50	-	67	100	Y	Gvt. Split
India 1994 Command/Videocon	PSC	81	10	50	-	55	100	Y	Gvt. Split
India 1994 BHP	PSC	77.5	-	50	-	55	100	Y	Gvt. Split
India 1995 Shell	PSC	82	-	50	-	64	100	Y	Gvt. Split
Iran 1997 Buy-back	RSA	96	-	-	-	96	65	N	Gvt Split
Iraq 1997 Lukoil PSC	PSC	92.8	-	-	-	92.8	40	N	No
Iraq 2000 Development Production Contract	RSA	91	-			91	50	N	No
Ireland 1994 License Round Concession	RT	25	-	25	-	-	100	N	No
Kazakhstan 1993 Anglo-Dutch Tenge	PSC	68.2	6	30	-	50	100	Y	No
Kazakhstan 1994 ORXY PSC	PSC	67.7	5	30	-	50	75	Y	Gvt Split
Kazakhstan 1995 Model PSC	PSC	83.6	10.5	30	30	60	60	Y	Surtax & Gvt Split
Kazakhstan 1992 Chevron PSC	PSC	81.7	25	30	15	50	100	Y	Royalty & Gvt Split

System	Type^	Take (%)	Royalty (%)	Income Tax (%)	Surtax (%)	Government Split* (%)	Cost Recovery Limits (%)	Ring-fencing? (Y/N)	Sliding scale Used?
Libya 1955 Veba Royalty/Tax	RT	94.9	16.67	60	65	51	100	Y	No
Libya 1966 AGIP PSC	PSC	94.8	-	-	-	94.8	35	Y	No
Libya 1966 Wintershall Royalty/Tax	RT	94.9	16.67	60	65	51	100	Y	No
Libya 1990 Model Contract	PSC	82.5	-	-	-	82.5	35	Y	Gvt Split
Libya 1999 Model PSC	PSC	95.3	-	-	-	95.3	100	N	No
Malaysia Late 80s/Early 90s PSC	PSC	81.6	10.5	45	-	60	60	Y	Gvt Split
Malaysia 1994 PSC	PSC	79.9	10.5	40	-	60	60	Y	Gvt Split
Malaysia 1994 Deepwater PSC	PSC	81.4	10.5	40	-	63	75	Y	Gvt Split
Malaysia R/C Model PSC	PSC	83.9	10.5	40	-	68	30	Y	Gvt Split
Mozambique 1984 Amoco	PSC	69.2	15	50	-	20	50	Y	Gvt Split
Myanmar 1990 First Round PSC	PSC	92.5	10	30.5	-	87.3	40	N	Gvt Split
Myanmar 1992 < 600ft	PSC	92.5	10	30.5	-	87.3	50	N	Gvt Split
Myanmar 1992 > 600ft	PSC	90	10	30.5	-	83.1	50	N	Gvt Split
Myanmar 1992 IOR	PSC	90	10	30.5	-	83.1	40	N	Gvt Split
Myanmar 1992 New E&P Blocks	PSC	92.5	10	30.5	-	87.3	40	N	Gvt Split
Myanmar 1992 RSF	PSC	76	20	30.5	-	50	40	N	No
Myanmar 1994 Model PSC	PSC	83.1	10	-	-	80	40	N	Gvt Split
Myanmar 1995 AIPN	PSC	91.2	10	30	-	85.3	50	N	Gvt Split
Nigeria 1973 Blocks	PSC	70	-	-	-	70	40	Y	No
Nigeria 1986 MOU	PSC	85	-	-	-	85	20	N	Gvt Split
Nigeria 1990 PSC Onshore	PSC	86.3	18	50	-	62	100	Y	Gvt Split
Nigeria 1994 Elf	PSC	75	6	50	-	45	100	Y	Royalty & Gvt Split
Nigeria 1994 Model Deep	PSC	76.6	4	50	-	50	100	Y	Royalty & Gvt Split
Nigeria 1994 Model Shallow	PSC	79.7	12	50	-	50	100	Y	Royalty & Gvt Split
Nigeria 1994 Shell	PSC	81.8	6	50	-	60	100	Y	Royalty & Gvt Split
Nigeria 2000 License Round	RT	67.9	4	65.75	-	-	100	Y	Royalty
Nigeria Block 215	PSC	93.1	4	85	-	50	100	N	Gvt Split

System	Type^	Take (%)	Royalty (%)	Income Tax (%)	Surtax (%)	Government Split* (%)	Cost Recovery Limits (%)	Ring-fencing? (Y/N)	Sliding scale Used?
Nigeria Marginal Fields	RT	67.8	4	65.75	-	-	100	N	Royalty
Nigeria PSC OPLs 98/118	PSC	89.8	16.75	-	-	60	100	Y	Gvt Split
Norway 1990	RT	78	-	78	-	-	100	Y	No
Oman 1989 Conquest	PSC	70	-	-	-	70	60	Y	No
Oman 1992	PSC	70	-	-	-	70	50-60	Y	No
Pakistan 1994 Offshore	PSC	80.6	12.5	40	-	60	100	Y	No
Pakistan 1977 Badin	RT	75.8	12.5	50	-	40	100	Y	No
Pakistan 1977 Potwar	RT	72.8	12.5	55	-	25	100	Y	No
Pakistan Onshore Zone 1	RT	65.7	12.5	50	-	15	100	Y	No
Pakistan Onshore Zone 2	RT	69.4	12.5	52.5	-	20	100	Y	No
Pakistan Onshore Zone 3	RT	72.8	12.5	55	-	25	100	Y	No
Qatar 1985 Sohio	PSC	85	-	-	-	85	30	Y	Gvt Split
Qatar 1992 Restated PSA	PSC	94.2	-	-	-	94.2	65	Y	Gvt Split
Qatar 1994 PSC	PSC	75	-	-	-	75	40	Y	Gvt Split
Qatar ARCO	PSC	81	-	-	-	81	40	Y	Gvt Split
Romania 1993	PSC	75	-	-	-	75	100	Y	No
Romania 1996	RT	60.8	10	38	-	25	100	Y	Royalty
South Africa Royalty/Tax	RT	65.8	4	35	30	20	100	N	Surtax
Syria 1985 Pecten	PSC	84.6	12.5	-	-	81	25	Y	Gvt Split
Syria 1988 Elf	PSC	89.8	12.5	-	-	87.5	25	Y	Gvt Split
Syria 1988 OXY	PSC	84.6	12.5	-	-	81	25	Y	Gvt Split
Syria 1992 Unocal	PSC	88.8	16	-	-	85	25	Y	Royalty & Gvt Split
Syria 1994 Model PSC	PSC	86.6	15	-	-	82.5	20-29	Y	Royalty & Gvt Split
Syria Transglobal PSC	PSC	83.8	12.5	-	-	80	33	Y	No
Thailand Royalty/Tax Unocal 2	RT	58	12.5	35	-	20	100	N	No
Thailand Thai I	RT	69.7	12.5	50	-	25	100	N	No
Thailand Thai II	RT	69.7	12.5	50	-	25	100	N	Royalty

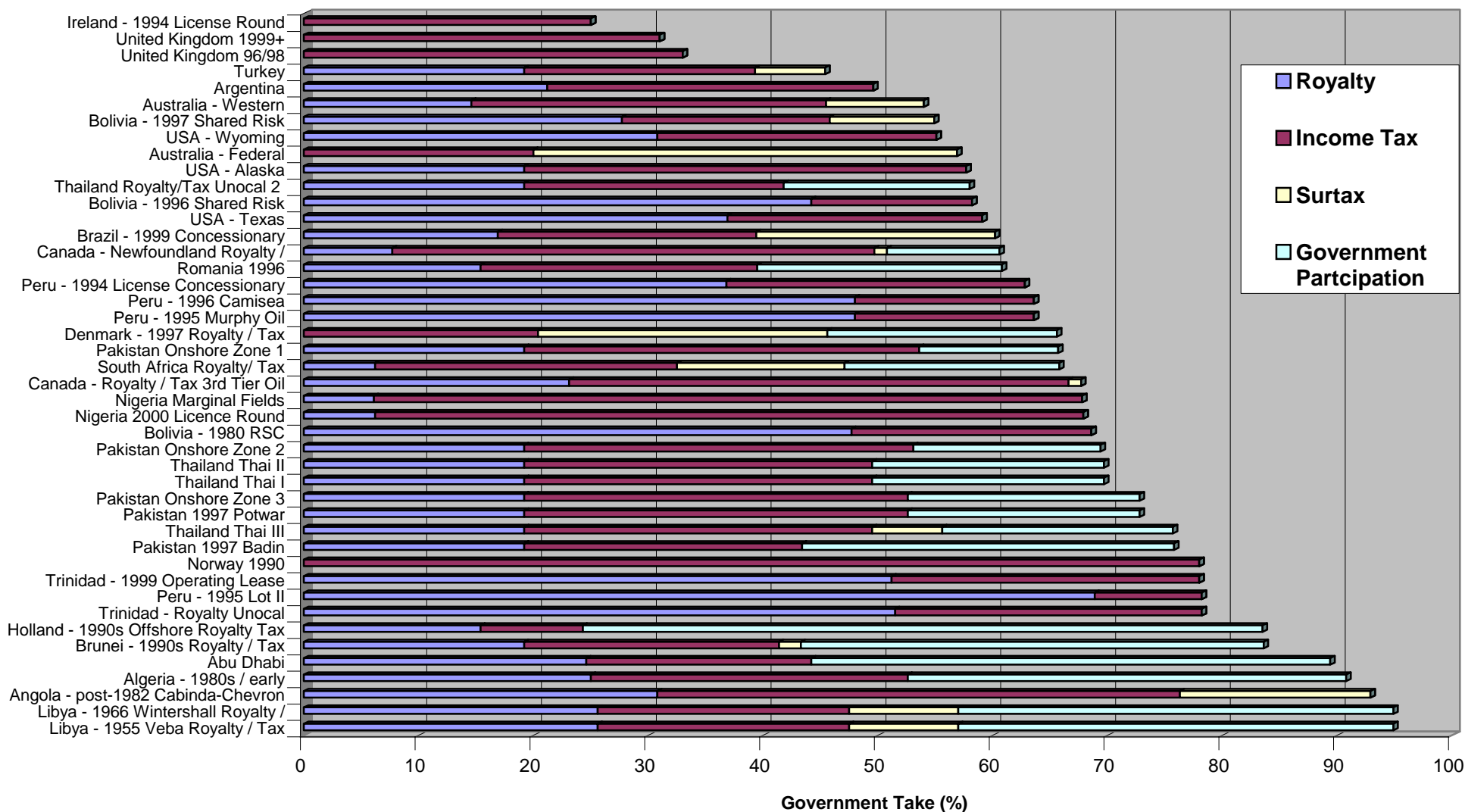
System	Type^	Take (%)	Royalty (%)	Income Tax (%)	Surtax (%)	Government Split* (%)	Cost Recovery Limits (%)	Ring-fencing? (Y/N)	Sliding scale Used?
Thailand Thai III	RT	75.7	12.5	50	20	25	100	Y	Royalty & Surtax
Turkey	RT	45.4	12.5	25	10	-	100	Y	No
Turkmenistan 1993 Joint Enterprise	PSC	82.6	7	35	-	70	100	Y	Royalty
Turkmenistan 1996 Monument PSC	PSC	74.6	10	25	-	60	60	Y	Royalty & Gvt Split
Turkmenistan 1196 Petronas PSC	PSC	74.6	10	25	-	60	60-70	Y	Royalty & Gvt Split
United Kingdom 1996/1998	RT	33	-	-	-	33	100	Y	No
United Kingdom 1999+	RT	31	-	-	-	31	100	Y	No
Vietnam 1988 Fina/Shell Contract	PSC	77.1	-	-	-	77.1	60	Y	Gvt Split
Vietnam 1991 PetroMin	PSC	76	-	-	-	76	40	Y	Gvt Split
Vietnam 1992 Lasmo and Itoh	PSC	82.2	-	-	-	82.2	32-35	Y	Gvt Split
Vietnam 1994 BHP Dai Hung	PSC	93.8	35	47	-	74.6	35	Y	Royalty & Gvt Split
Vietnam 1994 CanOxy	PSC	78.8	-	-	-	78.8	30-40	Y	Gvt Split
Vietnam 1996 Do Van Ha	PSC	80.6	5	50	-	58	<50	Y	Royalty
Yemen (North) 1981 Hunt Onshore	PSC	85	-	-	-	85	30	Y	No
Yemen (North) 1990 PSC	PSC	87.4	10	-	-	85	30	Y	Gvt Split
Yemen (South) 1990 PSC	PSC	80	-	-	-	80	50	Y	Gvt Split
Yemen 1986 Canoxy	PSC	77.5	-	-	-	77.5	40	N	Gvt Split
Yemen 1987 Total	PSC	85	-	-	-	85	40	N	Gvt Split
Yemen 1990 BP	PSC	83.1	10	-	-	80	27	N	Royalty & Gvt Split
Yemen 1990 Crescent	PSC	87.4	10	-	-	85	27	N	Royalty & Gvt Split
Yemen 1990 Oxy	PSC	89.8	10	-	-	88	26.5	N	Gvt Split
Yemen 1990/91 Sun	PSC	81.5	5	-	-	80	27.5	N	Royalty & Gvt Split
Yemen 1991 Clyde	PSC	87.4	10	-	-	85	25	N	Gvt Split
Yemen 1991 Exxon, Kufpec, Total	PSC	87.4	10	-	-	85	27.5	N	Royalty & Gvt Split

System	Type^	Take (%)	Royalty (%)	Income Tax (%)	Surtax (%)	Government Split* (%)	Cost Recovery Limits (%)	Ring-fencing? (Y/N)	Sliding scale Used?
Yemen 1991 Nimir	PSC	84.8	10	-	-	82	30	N	Gvt Split
Yemen 1991 Norsk Hydro	PSC	87.3	10	-	-	85	25	N	Gvt Split
Yemen 1991 Shell	PSC	89.7	11	-	-	87.2	25	N	Royalty & Gvt Split
Yemen 1995 PSC	PSC	88.2	10	-	-	82	20-30	Y	Gvt Split
Yemen 1997 Dusty Mac	PSC	82	6	-	-	80.2	50	Y	Royalty & Gvt Split
Yemen 1997 PSA	PSC	85.7	10	-	-	83.1	45	Y	Gvt Split
Yemen Clyde Block 2	PSC	87.4	10	-	-	85	27	N	Royalty & Gvt Split
Yemen 1996 Nimir Revised Terms	PSC	82.8	3	-	-	82	70	N	Gvt Split
Yemen Oxy Revised Terms	PSC	82.2	7	-	-	80	50	N	Royalty & Gvt Split
Yemen Post 1996 Oil and Gas	PSC	77.8	6	-	-	75.6	50	N	Royalty & Gvt Split
Yemen Preussag	PSC	78.2	6	-	-	75.9	50	N	Royalty & Gvt Split

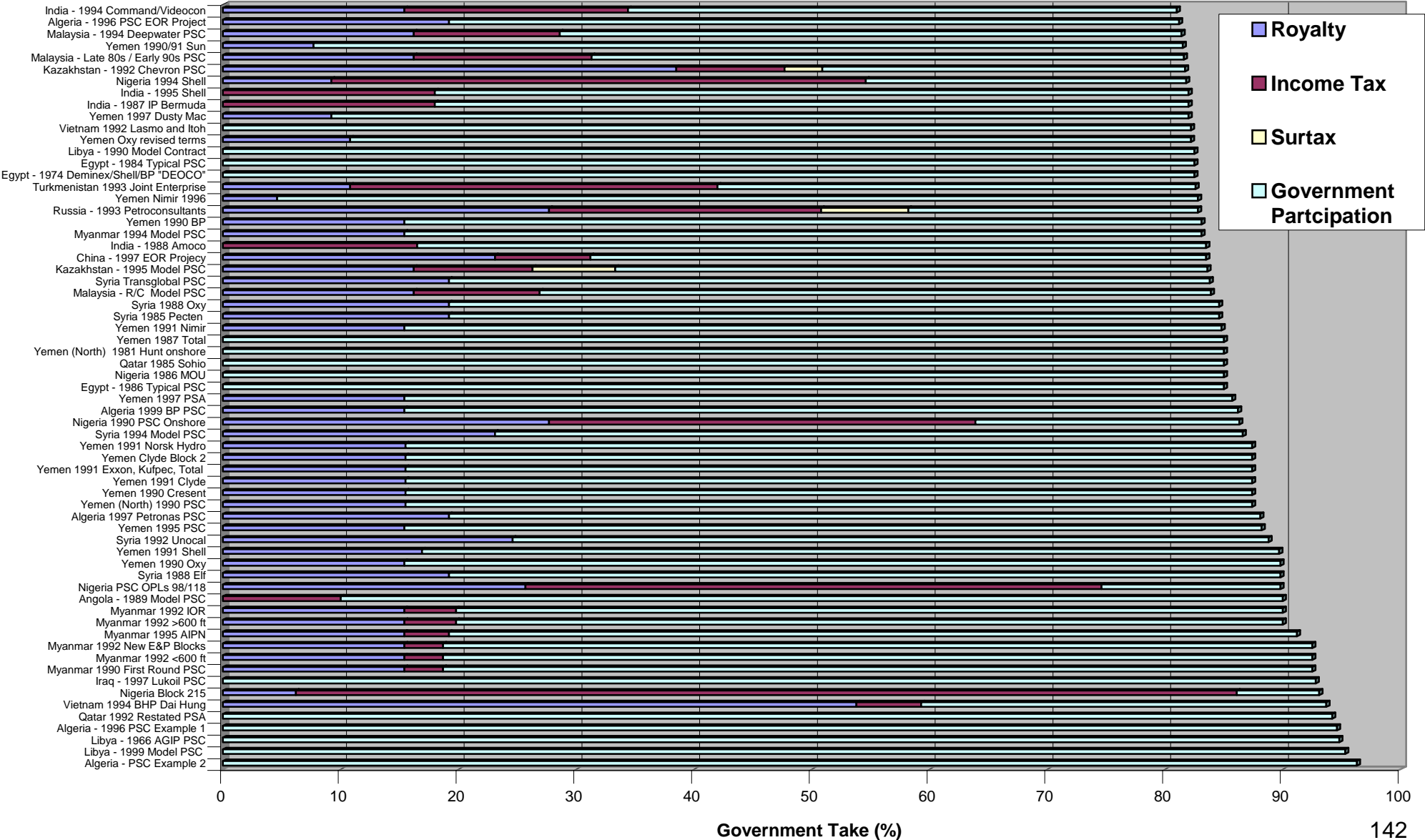
^ PSC - Production Sharing Contract
 RSA - Risk Sharing Agreement
 RT – Royalty Tax System

*=Government Split includes Government resource share (PSC), profit share (RSA), and government participation

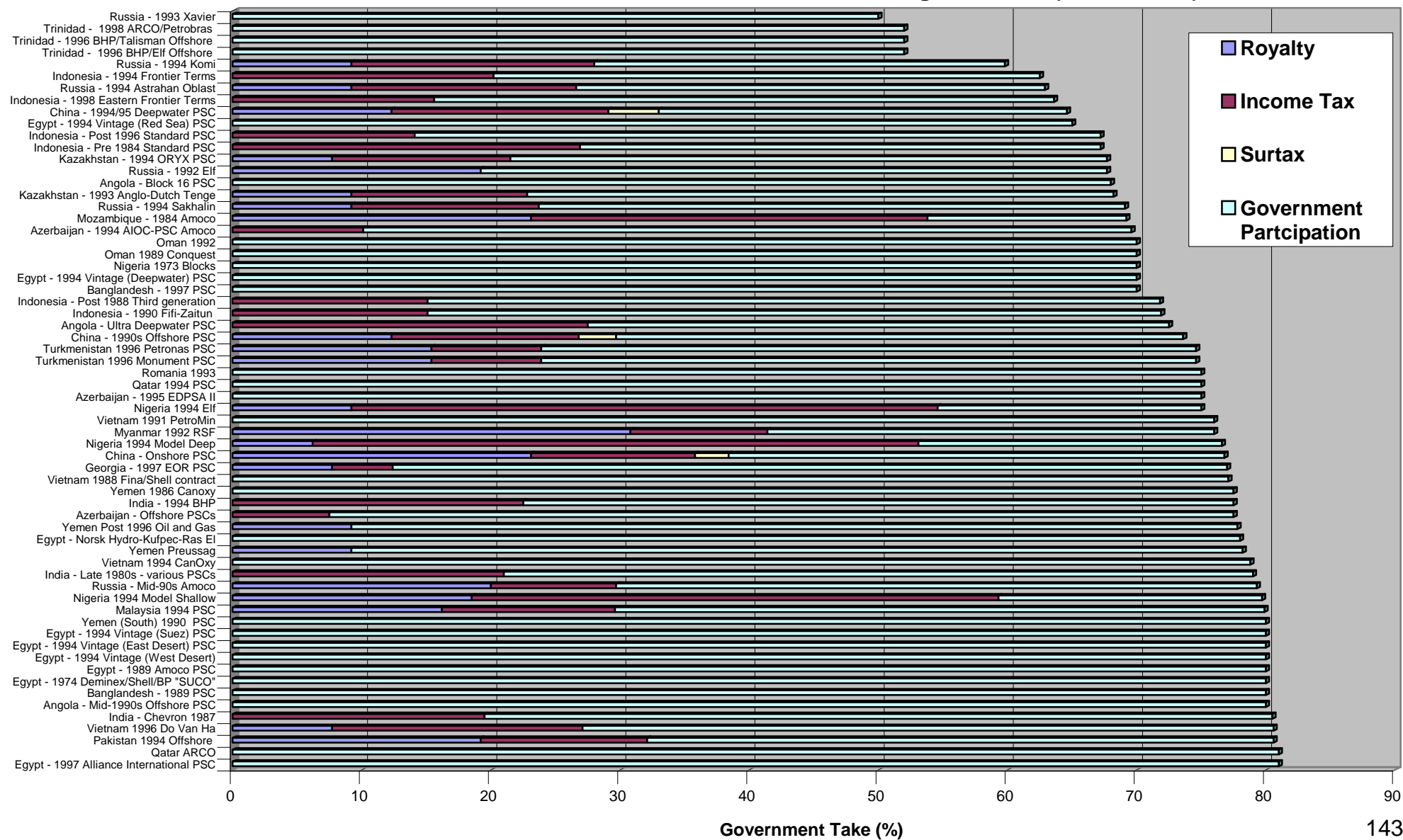
Full Breakdown of Government Take - All Royalty Tax Systems



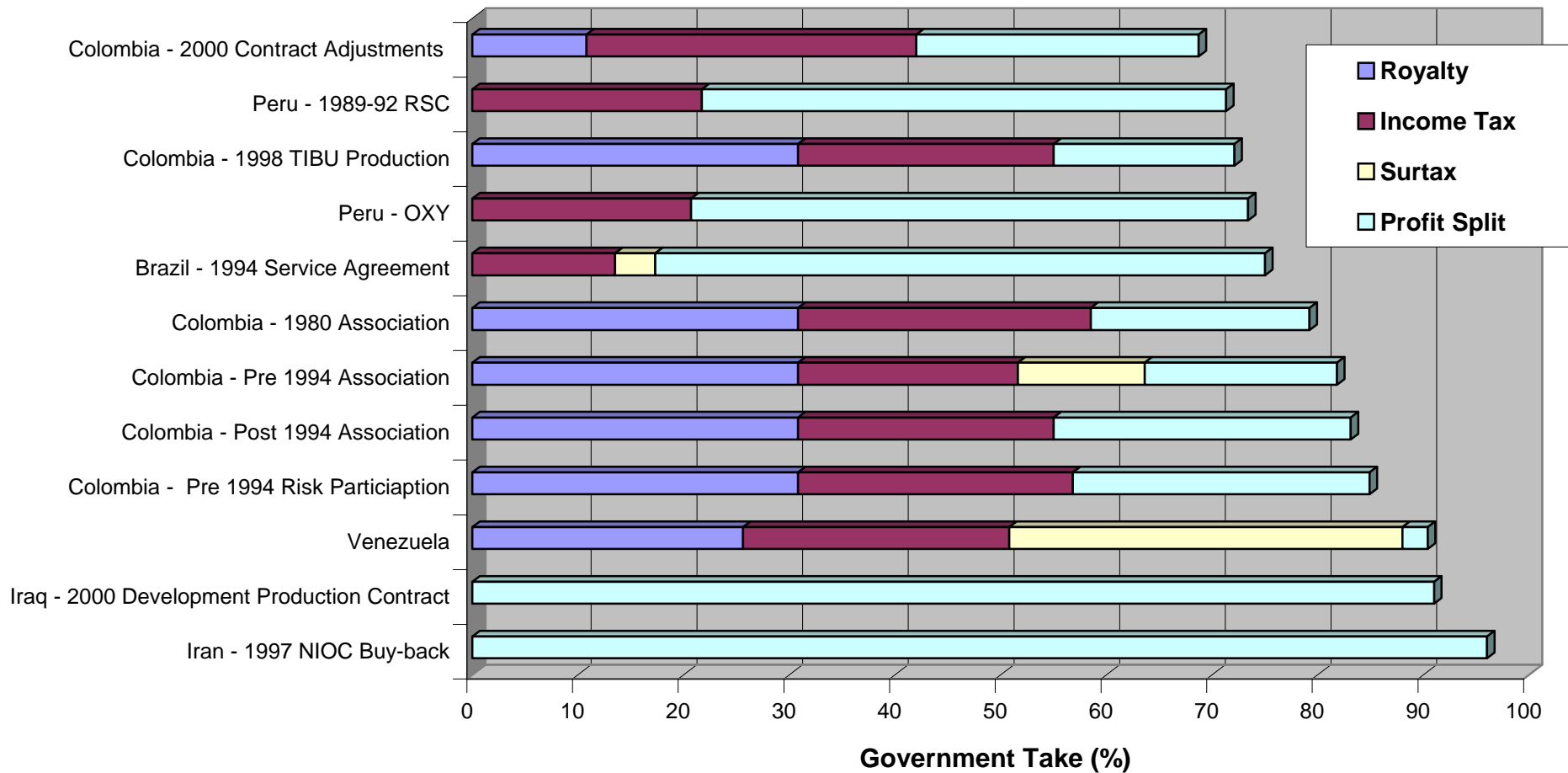
Full Breakdown of Government Take - All Production Sharing Contracts (Top Half)



Full Breakdown of Government Take - All Production Sharing Contracts (Bottom Half)



Full Breakdown of Government Take - All Risk Service Agreements



Appendix 5 – Analysis of Individual Systems

Included in Appendix 5 is a summary of all the systems reviewed in this report which do not feature in Appendix 3.

All summaries include:

- 1) Basic details of the system, including government take and system type
- 2) Graphical representation showing the break down of government take
- 3) Flow diagram showing the incremental stages of core taxation

Abu Dhabi (UAE) – 1980 Early Concessions

Contract Type: Royalty Tax System

% Government Take: 89.4%

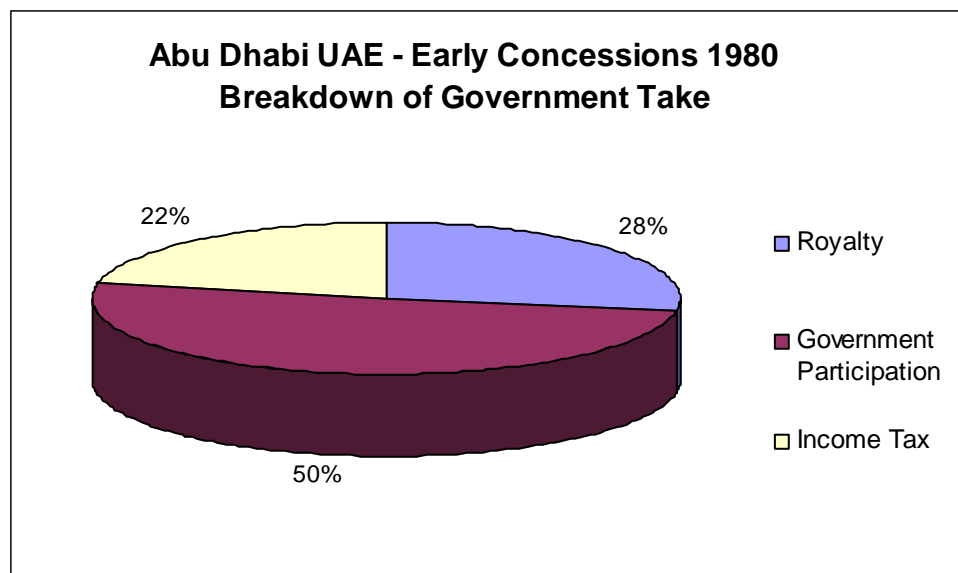
Core Taxes Used:

- 1) Royalty – 16%
- 2) Government Participation – 60%
- 3) Corporate Income Taxes – 65%

- 1) Three-tiered royalty rate based on production levels, with rates at 12.5%, 16% and 20%. 16% used here.
- 2) Government participation is at 60%, with accumulated costs reimbursed on resource discovery.
- 3) Similar three-tiered system used as for royalties, with income tax at rates of 55%, 65% or 85% being raised on contractor share of net profits. 65% used here.

Other Taxes: Commercial Discovery Bonuses (sliding scale)
Production Bonuses
Rentals

Cost Accounting: Depreciation – 20% Straight-line per annum
Individual License Ring-fencing



FLOW DIAGRAM FOR ABU DHABI (UAE)
EARLY CONCESSIONS (1980)

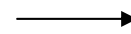
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

16% Royalty



\$16m

\$84m

Deductions for
Allowable Costs (assumed)



\$35m

\$49m

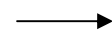
60% Government Participation



\$29.4m

\$19.6m

65% Income Tax



\$12.7m

\$6.9m



\$6.9m

Net income after tax



\$41.9m

Total Contractor Take

Total State Take

\$58.1m

41.9%

% Total Income

58.1%

10.6%

% "Take"

89.4%

Algeria – 1980s / Early 1990s Partnership Contracts

Contract Type: Royalty Tax System

% Government Take: 90.8%

Core Taxes Used:

- 1) Royalty – 16.25%
- 2) Government Participation – 51%
- 3) Corporate Income Taxes – 75%

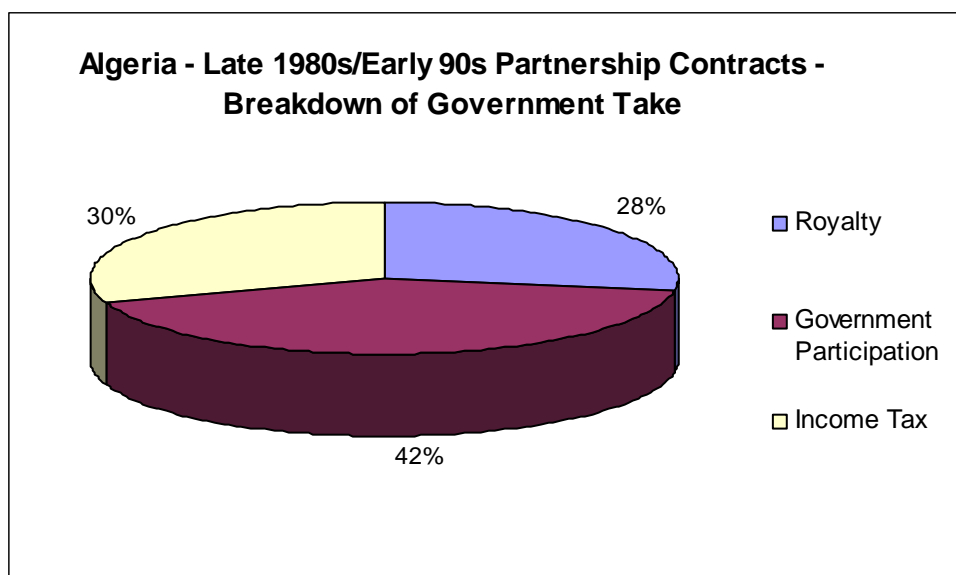
- 1) 16.25% royalty levied on gross income. Already producing areas have higher rates (20%) and previously unexplored areas have lower rates (12.5%).
- 2) Government participation is typically at 51%, but it has negotiated lower participation rates on individual contracts.
- 3) As for royalties, typical income tax rates of 75% are higher in producing areas (85%) and lower in unexplored areas (65%).

Other Taxes: Domestic Market Obligations based on discovery size

Cost Accounting: Depreciation – Straight-line per annum on most expenditure

Geological and Geophysical Cap Ex. fully expensed

Individual License Ring-fencing



FLOW DIAGRAM FOR ALGERIA
1980s / EARLY 1990s - PARTNERSHIP CONTRACTS

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

16.25% Royalty \longrightarrow **\$16.25m**

\$83.75m

\$35m \longleftarrow **Deductions for**
Allowable Costs (assumed)

\$48.75m

51% Government Participation \longrightarrow **\$29.9m**

\$23.85m

75% Income Tax \longrightarrow **\$17.9m**

\$5.95m

\$5.95m \longleftarrow **Net income after tax** \longrightarrow

\$40.95m **Total Contractor Take**

Total State Take **\$59.05m**

40.95% **% Total Income** **59.05%**

9.2% **% "Take"** **90.8%**

Algeria – 1996 Production Sharing Contract Example 1

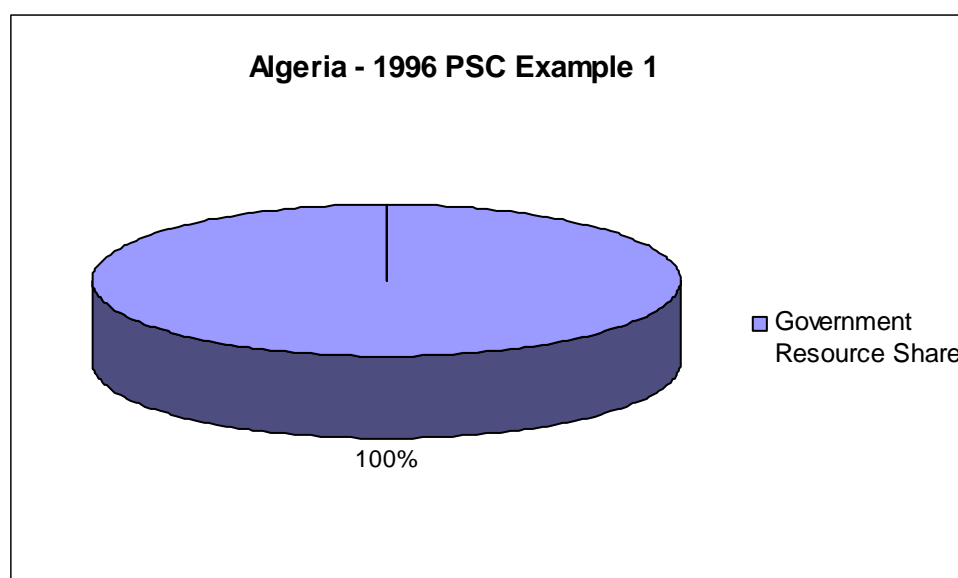
Contract Type: Production Sharing Contract

% Government Take: 94.6%

Core Taxes Used: 1) Government Resource Share – effective rate 94.6%

- 1) Contactor's share of production is based on a sliding scale, negatively correlated with production levels. There is strictly no separate cost recovery in this system, but the Contactor's share level is designed to factor in cost recovery as a % of gross revenues. The effect is that, in addition to the 35% assumed cost levels in this analysis the contractor is due a further 11% of gross revenues, of which the state holds a 51% participation. Government only therefore relinquishes 5.7% of the profit resource to the contractor.

Cost Accounting: Individual License Ring-fencing

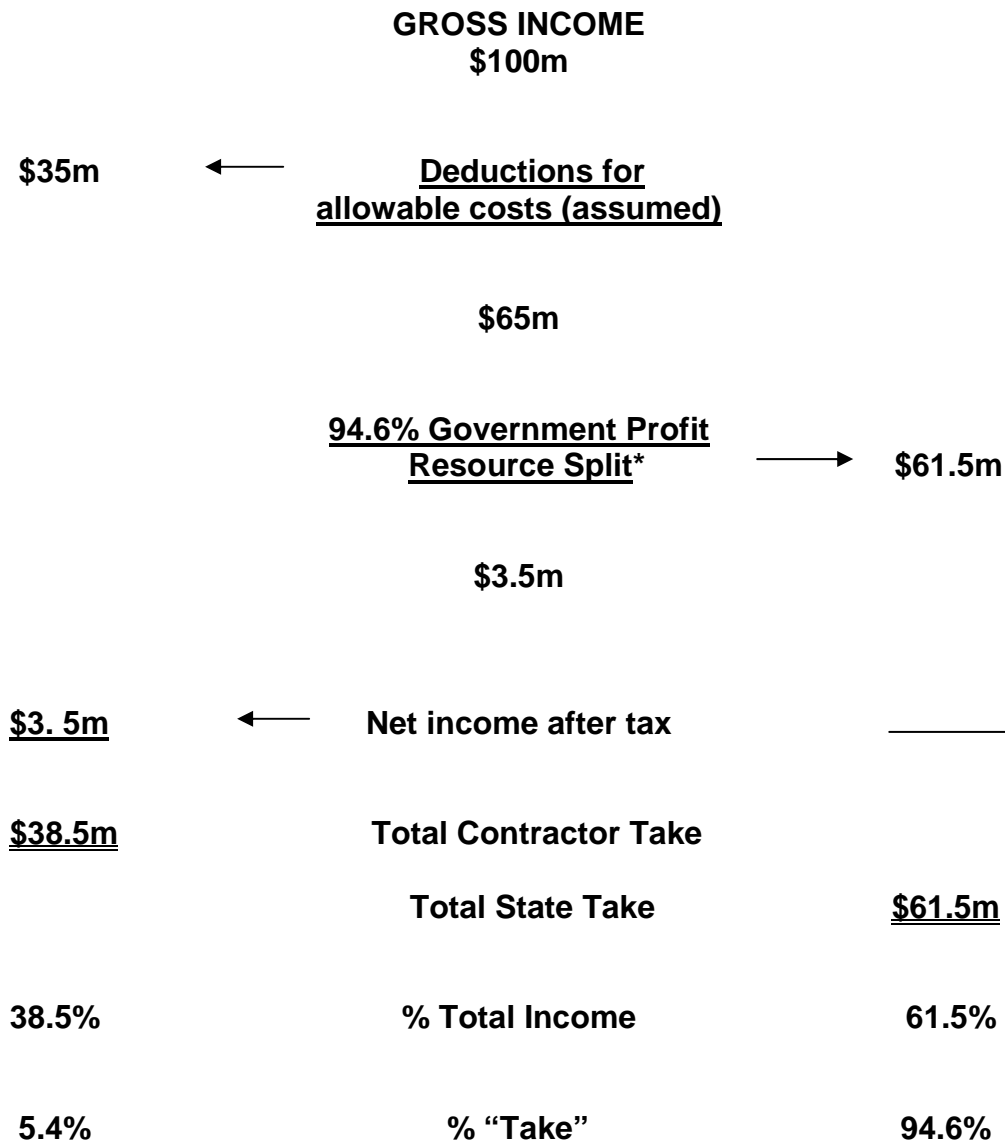


FLOW DIAGRAM FOR ALGERIA -
1996 PSC EXAMPLE 1

Based on Gross Income of \$100m

Contractor Share

State Take



** = contractor's effective share of revenues (post-assumed cost recovery) is 5.4% in medium/large fields. In reality cost recovery is factored into the contractor share calculation, rather than forming a separate entitlement.*

Algeria – 1996 Production Sharing Contract Example 2

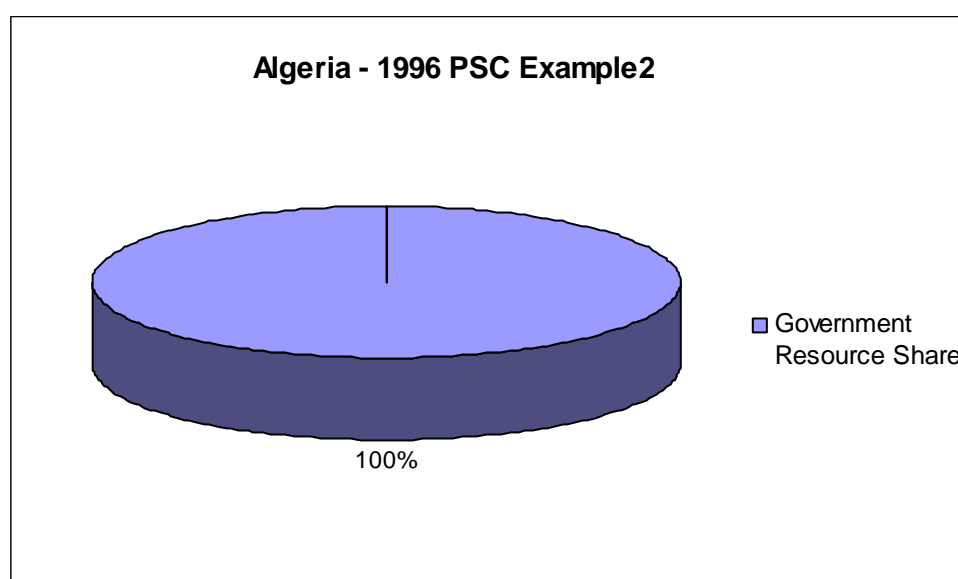
Contract Type: Production Sharing Contract

% Government Take: 96.3%

Core Taxes Used: 1) Government Profit Resource Share – 96%

- 1) Contactor's share of production is based on a sliding scale, negatively correlated with production levels. There is strictly no separate cost recovery in this system, but the Contactor's share level is designed to factor in cost recovery as a % of gross revenues. The effect is that, in addition to the 35% assumed cost levels in this analysis the contractor is due a further 4.9% of gross revenues, of which the state holds a 25% participation. Government only therefore relinquishes 3.7% of the profit resource to the contractor.

Cost Accounting: Individual License Ring-fencing

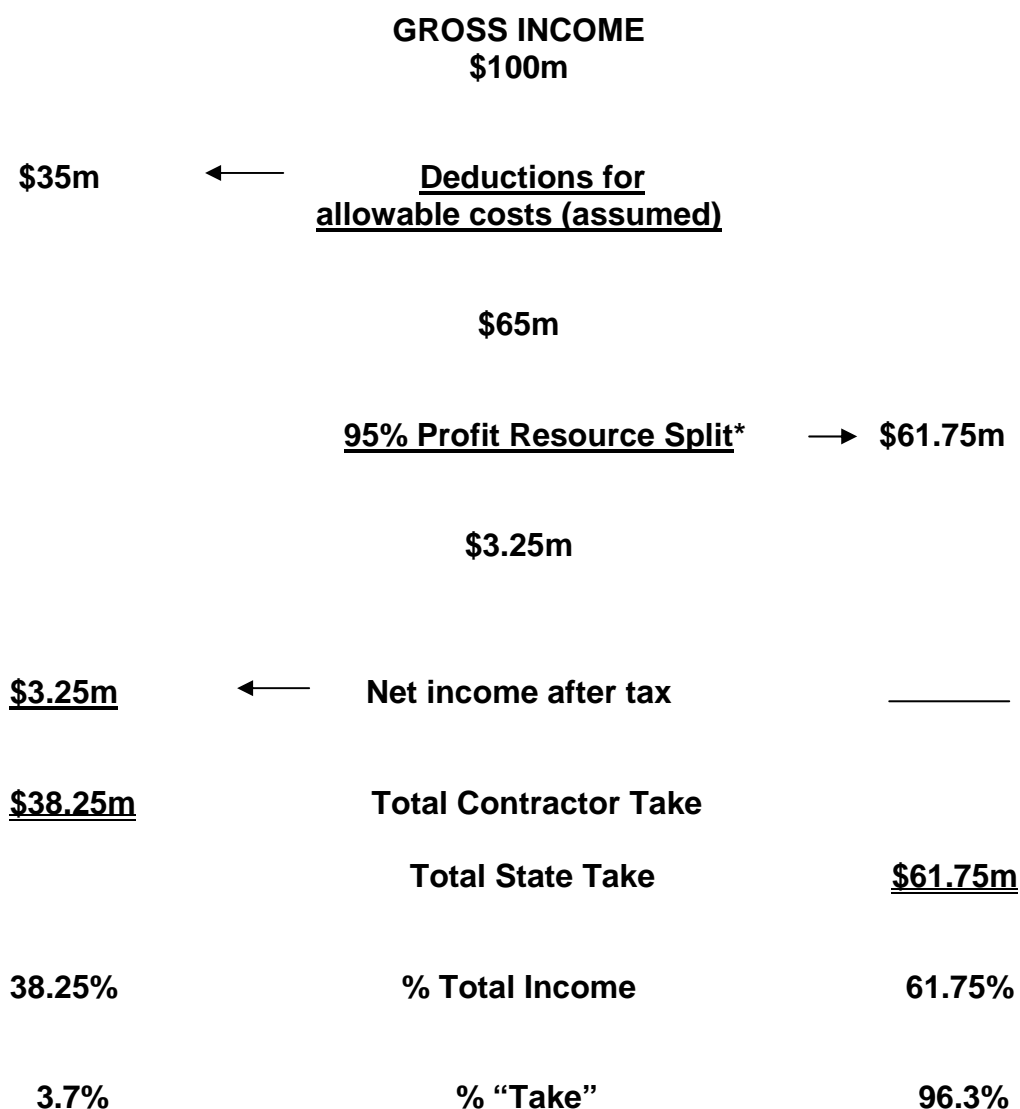


FLOW DIAGRAM FOR ALGERIA
– 1996 PSC EXAMPLE 2

Based on Gross Income of \$100m

Contractor Share

State Take



** = contractor’s effective share of revenues (post-assumed cost recovery) is 3.7% in medium/large fields. In reality cost recover is factored into the contractor share calculation, rather than forming a separate entitlement.*

Algeria – ARCO 1996 Production Sharing Contract EOR Project

Contract Type: Production Sharing Contract

% Government Take: 81.2%

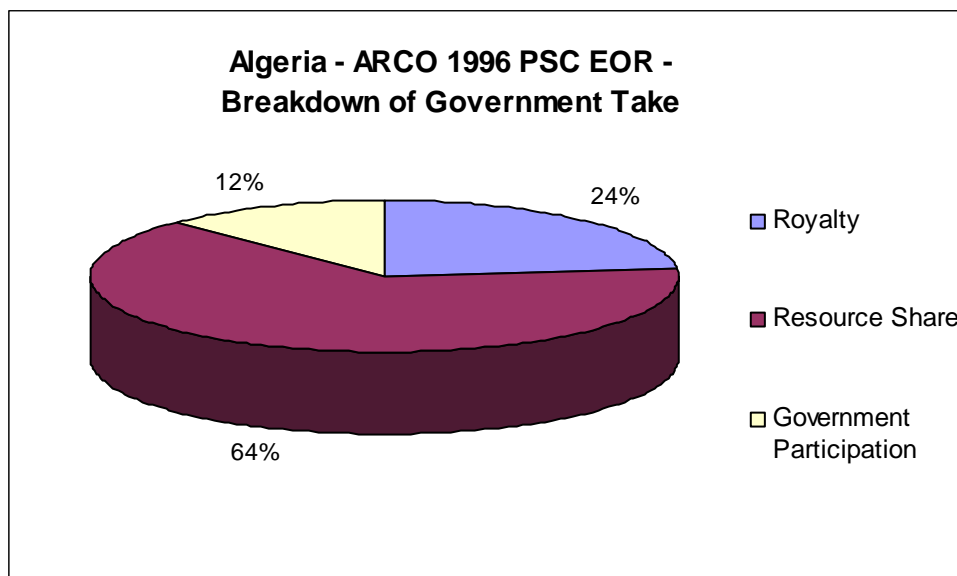
Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Government Resource Share – 64.25%
- 3) Government Participation – 35%

- 1) Fixed rate royalty of 12.5%
- 2) Fixed rate 64.25% government resource share
- 3) Government effectively entitled to a further 35% of contractor share of profit resource through participation.

Other Taxes: Signature Bonuses

Cost Accounting: Individual License Ring-fencing
Depreciation – 4 year Straight Line

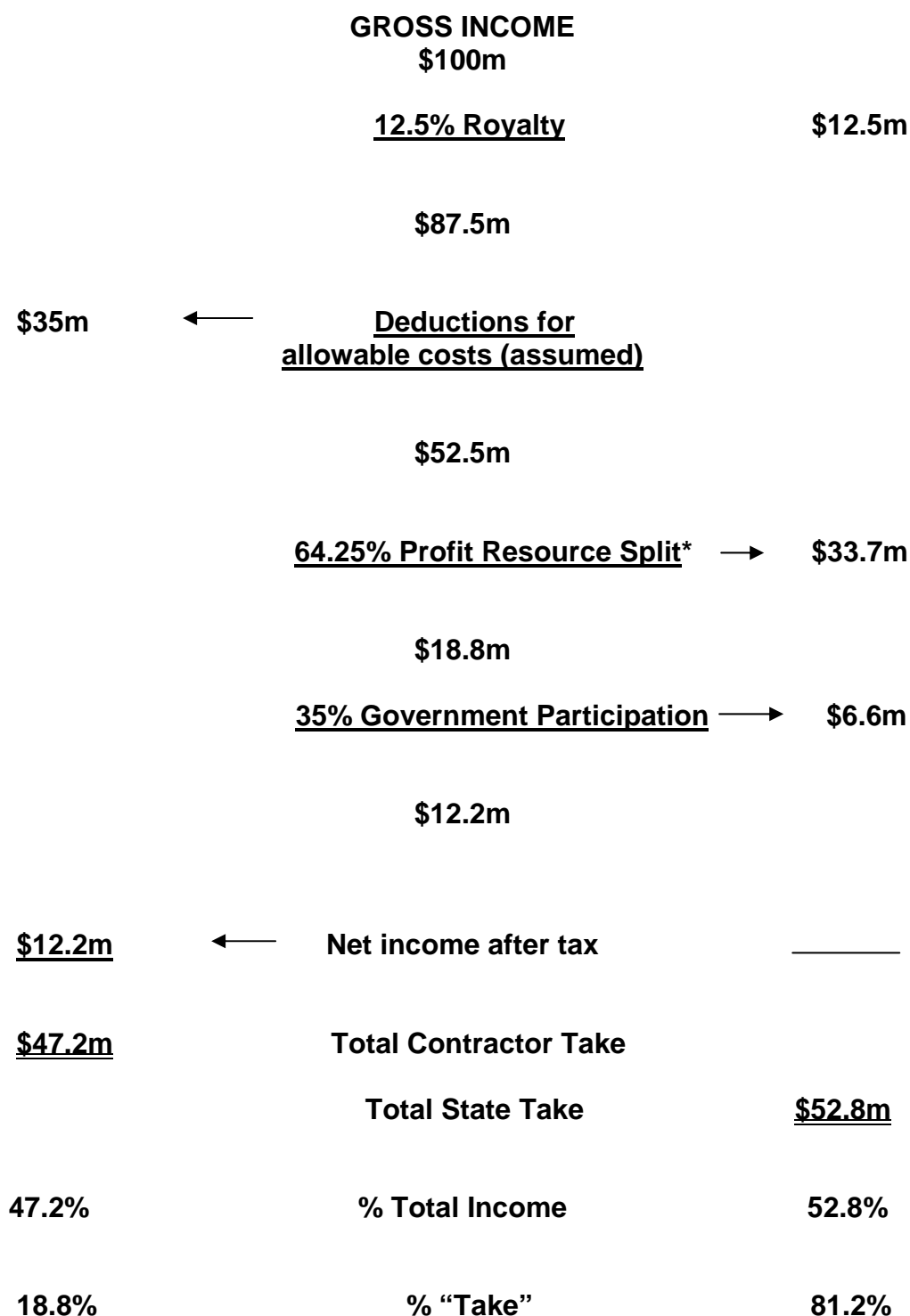


FLOW DIAGRAM FOR ALGERIA
– ARCO 1996 PSC EOR PROJECT

Based on Gross Income of \$100m

Contractor Share

State Take



Algeria – 1997 Petronas Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 81.2%

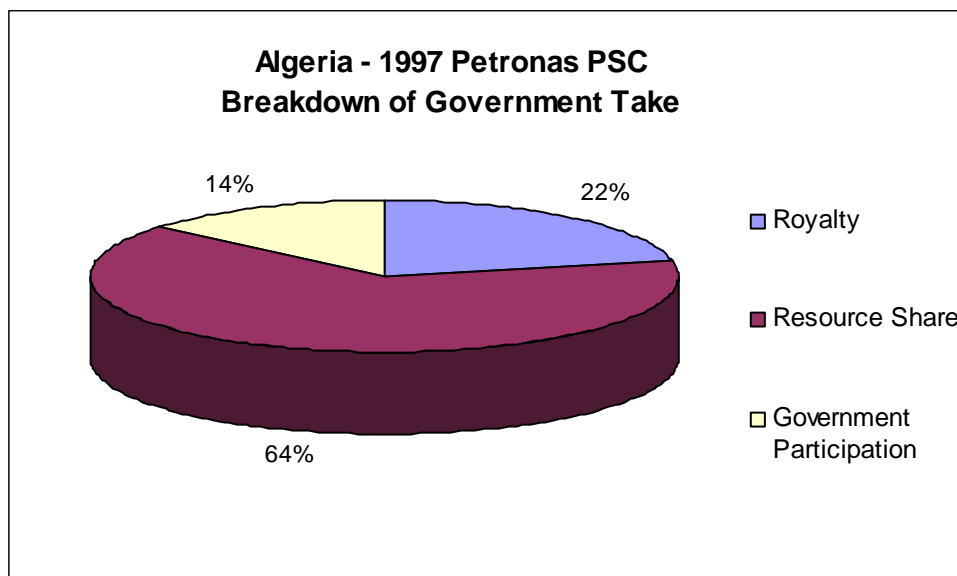
Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Government Resource Share – 70%
- 3) Government Participation – 51%

- 1) Fixed rate royalty of 12.5%
- 2) Sliding scale based on “R” Factor ranging from 50% to 85%. Figure here is 70%.
- 3) Government entitled to a further 51% of contractor share of profit resource through participation.

Other Taxes: Signature Bonuses
Domestic Market Obligations based on discovery size

Cost Accounting: Individual License Ring-fencing
Depreciation – 4 year Straight Line



FLOW DIAGRAM FOR ALGERIA
– 1997 PETRONAS PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty

\$12.5m

\$87.5m

\$35m



Deductions for
allowable costs (assumed)

\$52.5m

70% Profit Resource Split



\$36.75m

\$15.75m

51% Government Participation



\$8m

\$7.75m

\$42.75m



Net income after tax

\$42.75m

Total Contractor Take

Total State Take

\$57.25m

42.75%

% Total Income

57.25%

11.9%

% “Take”

88.1%

Algeria – 1999 BP Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 86.2%

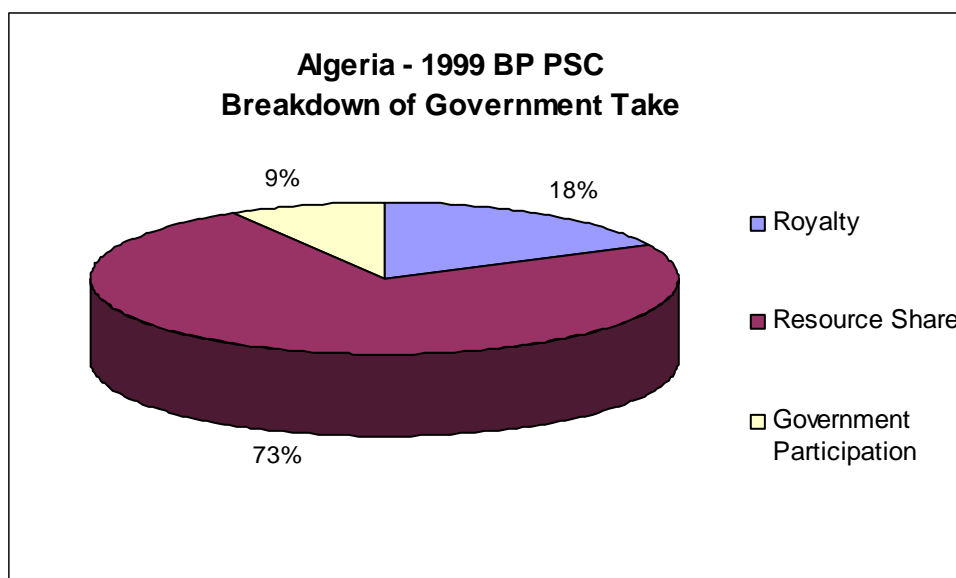
Core Taxes Used:

- 1) Royalty – 10%
- 2) Government Resource Share – 75%
- 3) Government Participation – 35%

- 1) Fixed rate royalty of 10%
- 2) Sliding scale based on production levels ranging from 60% to 88%. Figure here is 75%.
- 3) Government entitled to a further 35% of contractor share of profit resource through participation.

Other Taxes: Signature Bonuses

Cost Accounting: Individual License Ring-fencing



FLOW DIAGRAM FOR ALGERIA
– 1999 BP PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10% Royalty

\$10m

\$90m

\$35m



Deductions for
allowable costs (assumed)

\$55m

75% Profit Resource Split



\$41.25m

\$13.75m

35% Government Participation



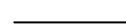
\$4.8m

\$8.95m

\$8.95m



Net income after tax



\$43.95m

Total Contractor Take

Total State Take

\$56.05m

43.95%

% Total Income

56.05%

13.8%

% “Take”

86.2%

Angola – 1989 Model Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 90%

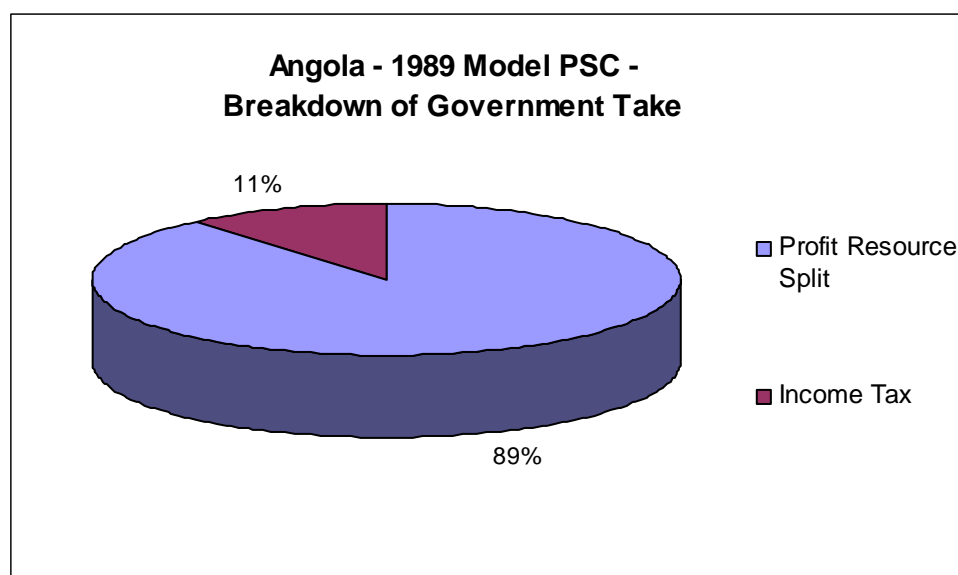
Core Taxes Used: 1) Government Profit Resource Share – 80%
2) Income Tax – 50%

1) Sliding scale profit split rates based on cumulative production. Government share ranges from 45% to 90%. 80% used here. Government participation and additional option (up to 51%) but this is not always exercised.

2) Fixed rate income tax of 50% of contractor's profit resource share.

Other Taxes: Signature Bonuses
Production Bonuses
Education Bonuses

Cost Accounting: Individual License Ring-fencing
50% Cost Recovery Limit
40% Uplift for Tangible Capital Costs
Depreciation – 5 year straight-line



FLOW DIAGRAM FOR ANGOLA
– 1989 MODEL PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

80% Profit Resource Split



\$52m

\$13m

50% Income Tax



\$6.5m

\$6.5m

\$6.5m



Net income after tax

\$41.5m

Total Contractor Take

Total State Take

\$58.5m

41.5%

% Total Income

58.5%

10%

% “Take”

90%

Angola – Mid-1990s Offshore Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 80%

Core Taxes Used: 1) Government Profit Resource Share – 80%

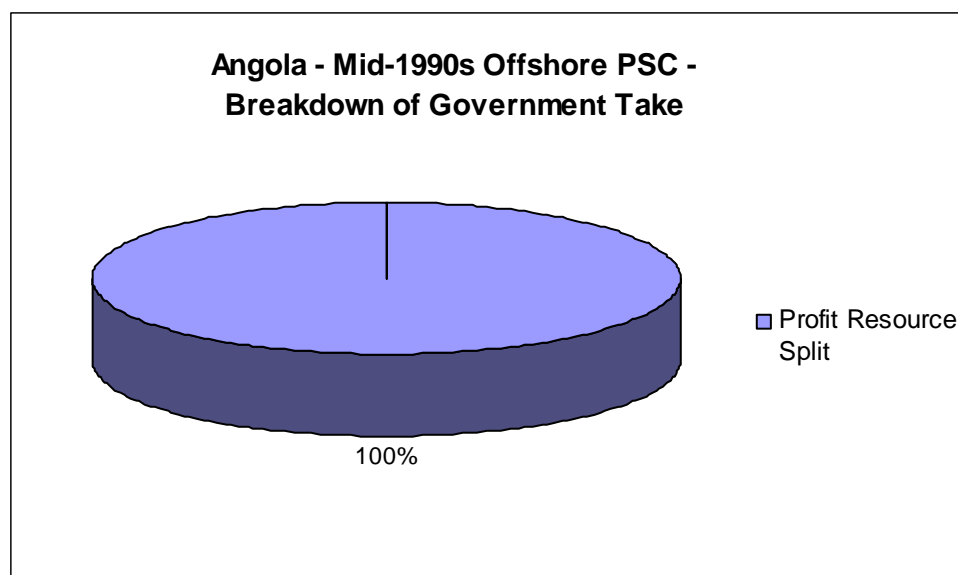
- 1) Sliding scale profit split rates based on cumulative production. Government share ranges from 50% to 90%. 80% used here. Government participation an additional option (up to 51%) but this is not always exercised.

Other Taxes: Signature Bonuses

Rentals - \$300 per km² for development areas

Domestic Market Obligations – up to 40%

Cost Accounting: Individual License Ring-fencing
50% Cost Recovery Limit
40% Uplift for development Costs
Depreciation – 5 year straight-line



FLOW DIAGRAM FOR ANGOLA
– MID-1990s OFFSHORE PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

80% Profit Resource Split



\$52m

\$13m

\$13m



Net income after tax



\$48m

Total Contractor Take

Total State Take

\$52m

48%

% Total Income

52%

20%

% “Take”

80%

Angola– Block 16 Production Sharing Contract

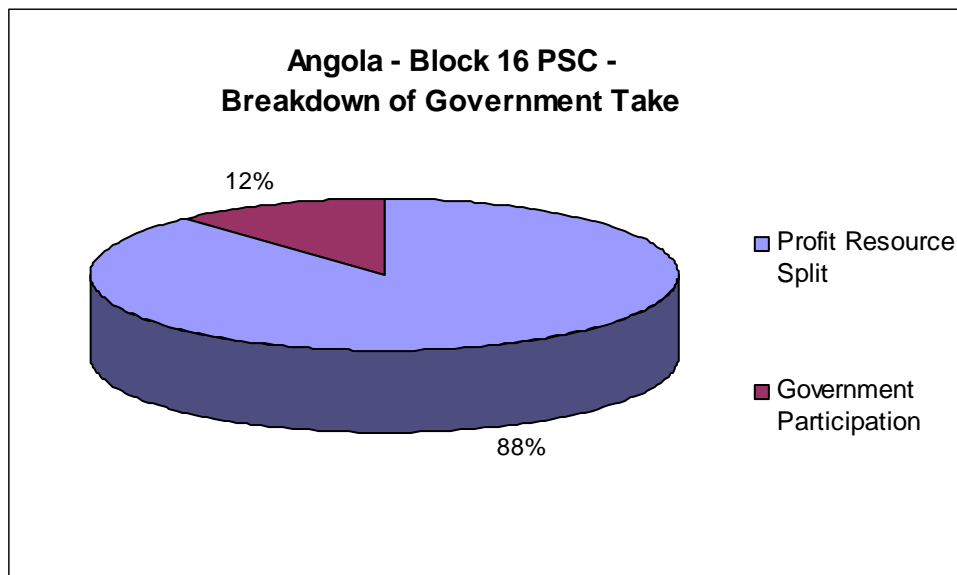
Contract Type: Production Sharing Contract

% Government Take: 68%

Core Taxes Used: 1) Government Profit Resource Share – 60%
2) Government Participation – 20%

- 1) Flat rate government profit resource share of 60%.
- 2) Government also entitled to a further 20% share through participation. As with most participation arrangements, government is “carried through” exploration phase (i.e. bears no risk).

Cost Accounting: Individual License Ring-fencing
55% Cost Recovery Limit
40% Uplift for development Costs
Depreciation – 5 year straight-line



FLOW DIAGRAM FOR ANGOLA
– BLOCK 16 PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

60% Profit Resource Split



\$39m

\$26m

20% Government Participation



\$5.2m

\$20.8m

\$20.8m



Net income after tax



\$55.8m

Total Contractor Take

Total State Take

\$44.2m

55.8%

% Total Income

44.2%

32%

% “Take”

68%

Angola – Ultra Deepwater Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 72.5%

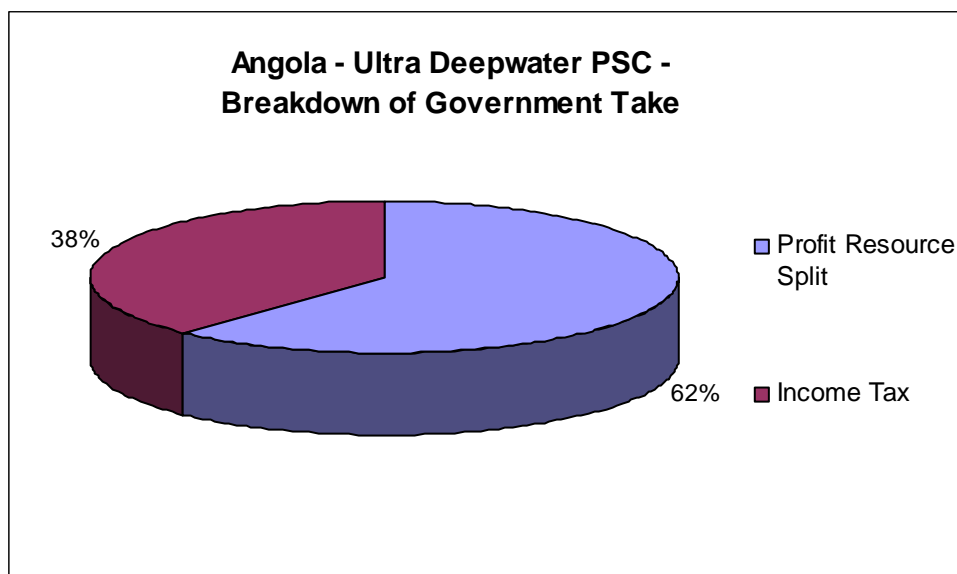
Core Taxes Used: 1) Government Profit Resource Share – 45%
2) Income Tax – 50%

- 1) Sliding scale profit resource split based on after tax Rate of Return (ROR). Government share ranges from 15% to 80%. 45% used here. Possible Government Participation of up to 20% (full, not carried) but this is not always taken up and not included here.
- 2) Income tax – fixed rate of 50%. Flexible system means that profit splits can be adjusted to factor in income tax and utilise just one tax measure.

Other Taxes: Signature Bonuses
“Social” Bonuses
Start-up Bonuses
Regular Lifting Bonuses

Domestic Market Obligations – option to purchase up to 50% of resource at market price

Cost Accounting: 50-55% Cost Recovery Limit
40% Uplift for development Costs
Capital costs during exploration expensed
45-55% uplift for development costs
Depreciation – 4 year straight-line



FLOW DIAGRAM FOR ANGOLA
– ULTRA DEEPWATER PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

45% Profit Resource Split



\$29.25m

\$35.75m

50% Income Tax



\$17.85m

\$17.9m

\$17.9m



Net income after tax



\$52.9m

Total Contractor Take

Total State Take

\$47.1m

52.9%

% Total Income

47.1%

27.5%

% “Take”

72.5%

Angola – Post 1982 Cabinda-Chevron Terms

Contract Type: Royalty / Tax

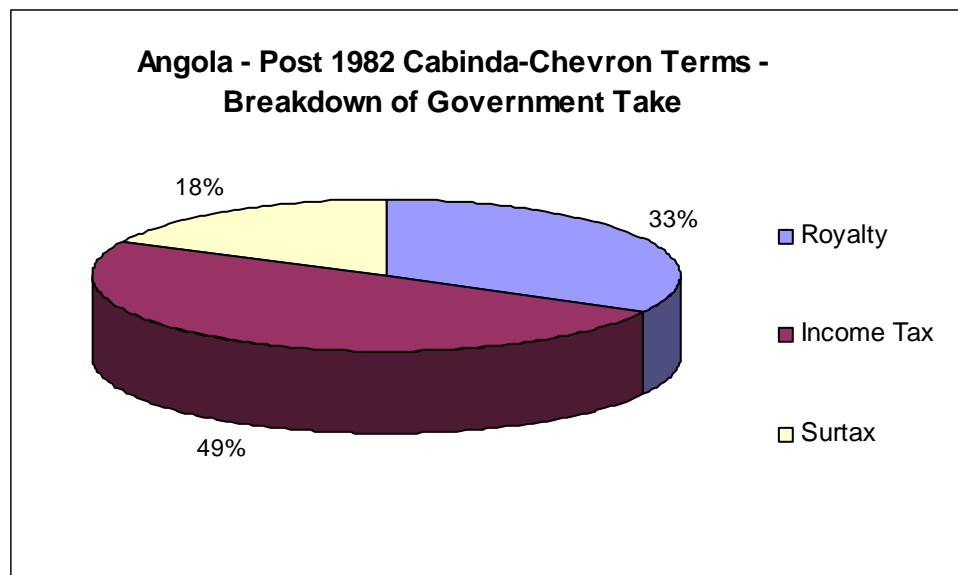
% Government Take: 92.9%

Core Taxes Used:

- 1) Royalty – 20%
- 2) Income Tax – 65.75%
- 3) Surtax – 70%

- 1) Fixed Rate 20% royalty.
- 2) Income tax – fixed rate of 65.75%.
- 3) “Petroleum Transaction Fee” is a flat rate 70% Tax which is levied on post income tax profits, adjusted for the add-back of royalty and interest (which are non-deductible) but additional deductions for 50% capital asset investment uplift and production allowances. (Neutral effect assumed here).

Cost Accounting: Individual license ring-fencing



FLOW DIAGRAM FOR ANGOLA
– POST 1982 CABINDA-CHEVRON TERMS

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

20% Royalty



\$20m

\$80m

\$35m



Deductions for
allowable costs (assumed)

\$45m

65.75% Income Tax



\$29.6m

\$15.4m

70% Surtax



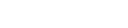
\$10.8m

\$4.6m

\$4.6m



Net income after tax



\$39.6m

Total Contractor Take

Total State Take

\$60.4m

39.6%

% Total Income

60.4%

7.1%

% “Take”

92.9%

Azerbaijan – Offshore Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 77.5%

Core Taxes Used:

- 1) Government Profit Resource Share – 62.5%
- 2) Government Participation – 20%
- 3) Income Tax – 25%

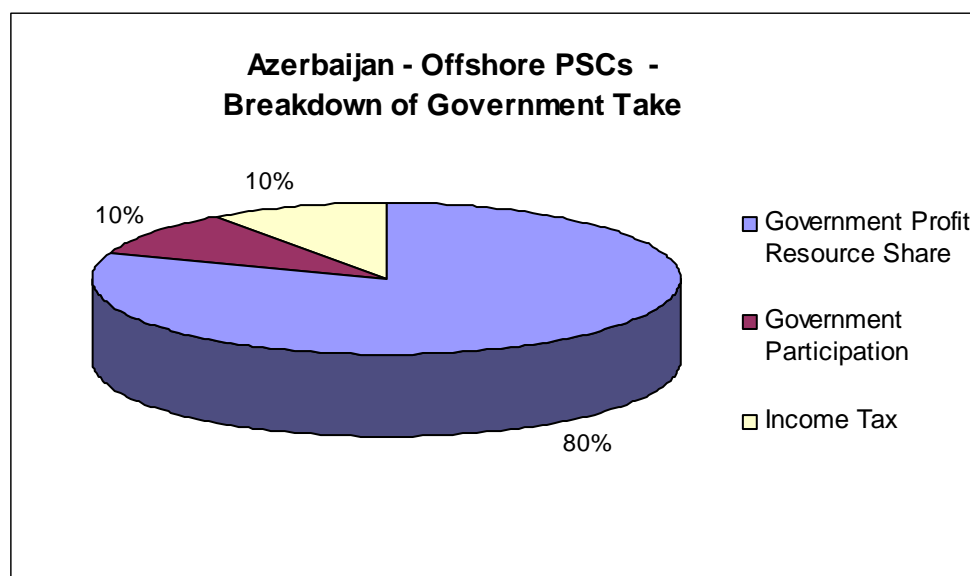
- 1) Sliding scale profit resource split based on after tax “R” Factor. Government share ranges from 45% to 80%. 62.5% used here.
- 2) Government Participation of between 7.5% and 40%. Typically around 20% (used here)
- 3) Income Tax – flat rate 25% for offshore contracts (32.5% onshore)

Other Taxes:

- Bonuses
- Domestic Market Obligations – some but not all
- Withholding Tax – 15%
- Ad Valorem property tax – 0.5%

Cost Accounting:

- Individual license ring-fencing
- Capital Cost Recovery restricted to 50% (overall = 100%)
- Interest cost recovery restricted to LIBOR + 4%
- Depreciation – 7 year straight-line



FLOW DIAGRAM FOR ANGOLA
– AZERBAIJAN OFFSHORE PSCs

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

62.5% Government Resource Split



\$40.6m

\$24.4m

20% Government Participation



\$4.9m

\$19.5m

25% Income Tax



\$4.9m

\$14.6m

\$14.6m



Net income after tax



\$49.6m

Total Contractor Take

Total State Take

\$50.4m

49.6%

% Total Income

50.4%

22.5%

% “Take”

77.5%

Azerbaijan – 1994 AIOC- Production Sharing Contract Amoco & Other

Contract Type: Production Sharing Contract

% Government Take: 69.6%

Core Taxes Used:

- 1) Government Profit Resource Share – 55%
- 2) Government Participation – 10%
- 3) Income Tax – 25%

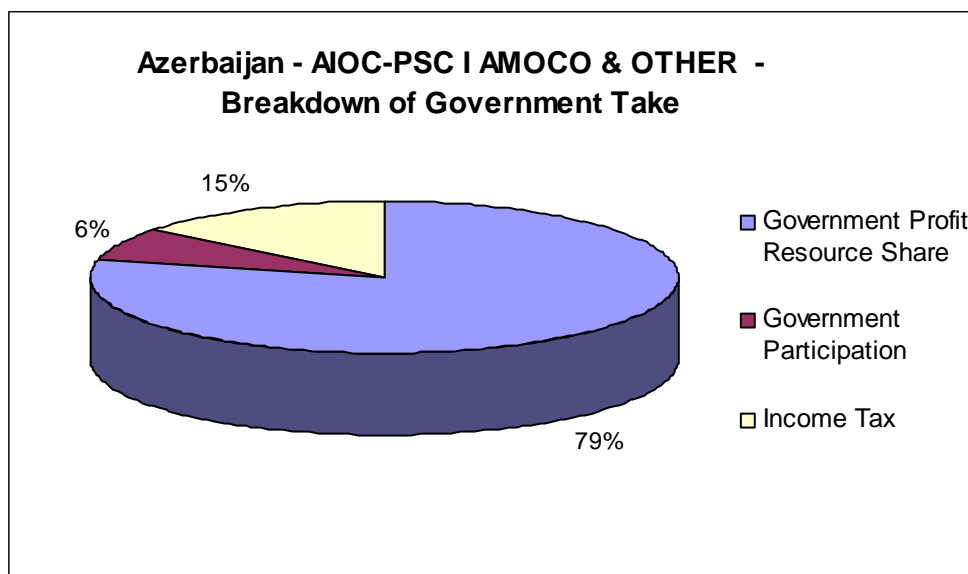
- 1) Sliding scale profit resource split based on after tax “R” Factor. Government share ranges from 20% to 80%. 55% used here. For gas, there is potential to negotiate these rates.
- 2) Government Participation of 10%.
- 3) Income Tax – flat rate 25%.

Other Taxes:

- Signature Bonuses
- Exportation Bonus
- Domestic Market Obligations – 20%
- Wage Taxes (hiring quotas)
- 5% Withholding Tax

Cost Accounting:

- Individual license ring-fencing
- Capital Cost Recovery restricted to 50% (overall = 100%)
- Interest cost recovery restricted to LIBOR + 4%
- Depreciation – 4 year straight-line
- Abandonment Costs – UOP depreciation policy



FLOW DIAGRAM FOR AZERBAIJAN
- 1994 AIOC-PSC I AMOCO & OTHER

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

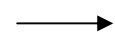
55% Government Resource Split



\$35.75m

\$29.25m

10% Government Participation



\$2.9m

\$26.35m

25% Income Tax



\$6.6m

\$19.75m

\$19.75m



Net income after tax



\$54.75m

Total Contractor Take

Total State Take

\$45.25m

54.75%

% Total Income

45.25%

30.4%

% "Take"

69.6%

Azerbaijan– 1995 EDPSA II

Contract Type: Production Sharing Contract

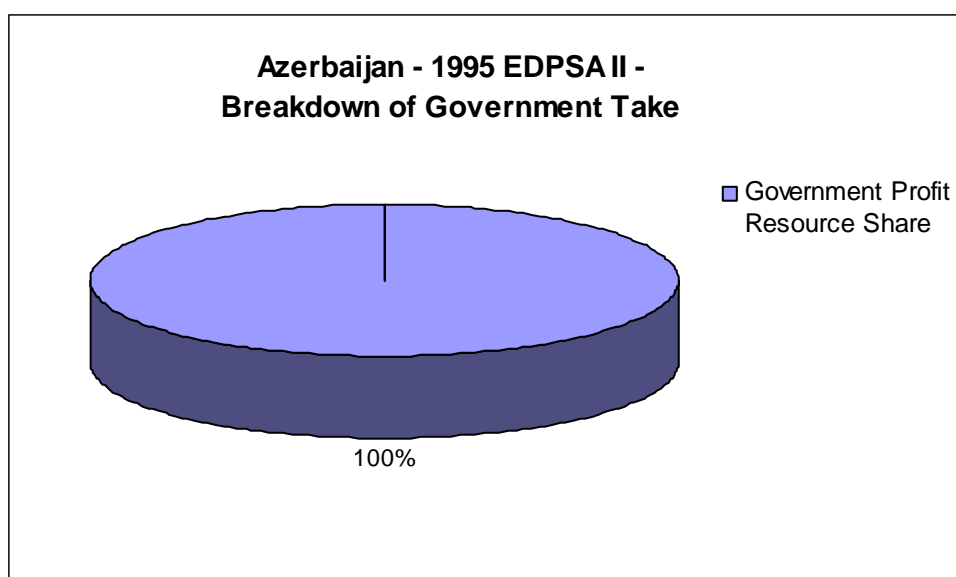
% Government Take: 75%

Core Taxes Used: 1) Government Profit Resource Share – 75%

- 1) Sliding scale profit resource split based on after tax “R” Factor. Government share ranges from 50% to 90%. Figure here is 75%. From government share (which is actually received by SOCAR – National Oil Company) income tax (32% rate on contractor share and costs through government participation of 50% are both paid.

Other Taxes: Signature Bonuses
Development Bonuses
Not exempt from Customs Duties
Social Insurance Contributions
5% Withholding Tax

Cost Accounting: Individual license ring-fencing
Depreciation – 4/5 year straight-line



FLOW DIAGRAM FOR AZERBAIJAN
- 1995 EDPSA II

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

75% Government Resource Split



\$48.75m

\$16.25m

\$16.25m



Net income after tax

\$51.25m

Total Contractor Take

Total State Take

\$48.75m

51.25%

% Total Income

48.75%

25%

% "Take"

75%

Bangladesh – 1989 Scimitar Production Sharing Contract

Contract Type: Production Sharing Contract

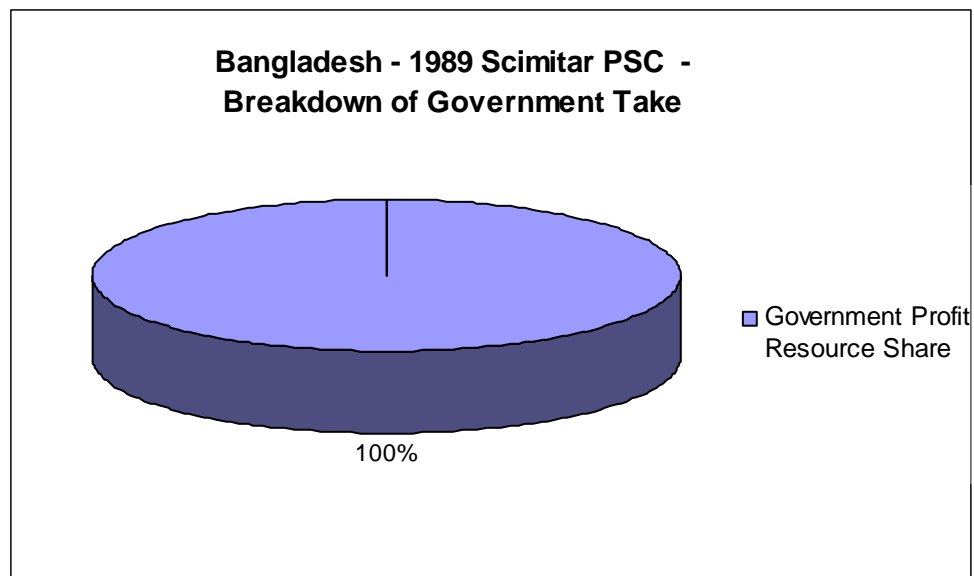
% Government Take: 80%

Core Taxes Used: 1) Government Profit Resource Share – 80%

- 1) Sliding scale profit resource split based on production levels. Government share ranges from 70% to 90%. 80% used.

Other Taxes: Sliding Scale Production Bonuses
Social Insurance Contributions
Domestic Market Obligations

Cost Accounting: Sliding scale cost recovery based on production levels (30-40%)
Individual license ring-fencing
Depreciation – 10 year straight-line



FLOW DIAGRAM FOR BANGLADESH
- 1989 SCIMITAR PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

80% Government Resource Split



\$52m

\$13m

\$13m



Net income after tax

\$48m

Total Contractor Take

Total State Take

\$52m

48%

% Total Income

52%

20%

% "Take"

80%

Bangladesh – 1997 Production Sharing Contract

Contract Type: Production Sharing Contract

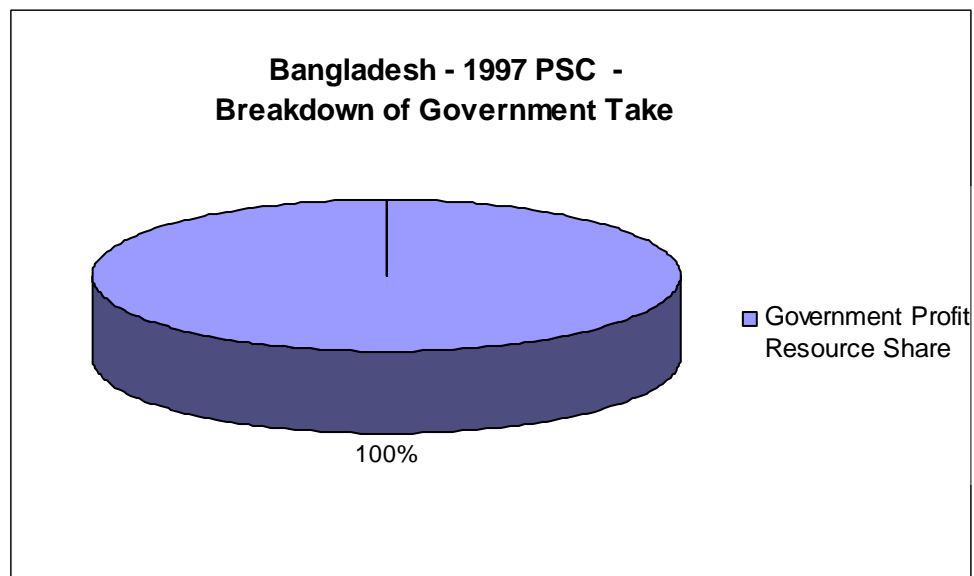
% Government Take: 70%

Core Taxes Used: 1) Government Profit Resource Share – 70%

- 1) Sliding scale profit resource split based on production levels. Government share ranges from 60% to 75%. 70% used.

Other Taxes: Sliding Scale Production Bonuses
Domestic Market Obligations

Cost Accounting: Sliding scale cost recovery based on production levels (40-50%)
Individual license ring-fencing
Depreciation – 4 year straight-line
Loan interest C/R limits as % total costs



FLOW DIAGRAM FOR BANGLADESH
- 1997 PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

70% Government Resource Split



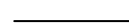
\$45.5m

\$19.5m

\$19.5m



Net income after tax



\$54.5m

Total Contractor Take

Total State Take

\$45.5m

54.5%

% Total Income

45.5%

30%

% "Take"

70%

Brunei – 1990 Royalty / Tax

Contract Type: Royalty / Tax

% Government Take: 83.6%

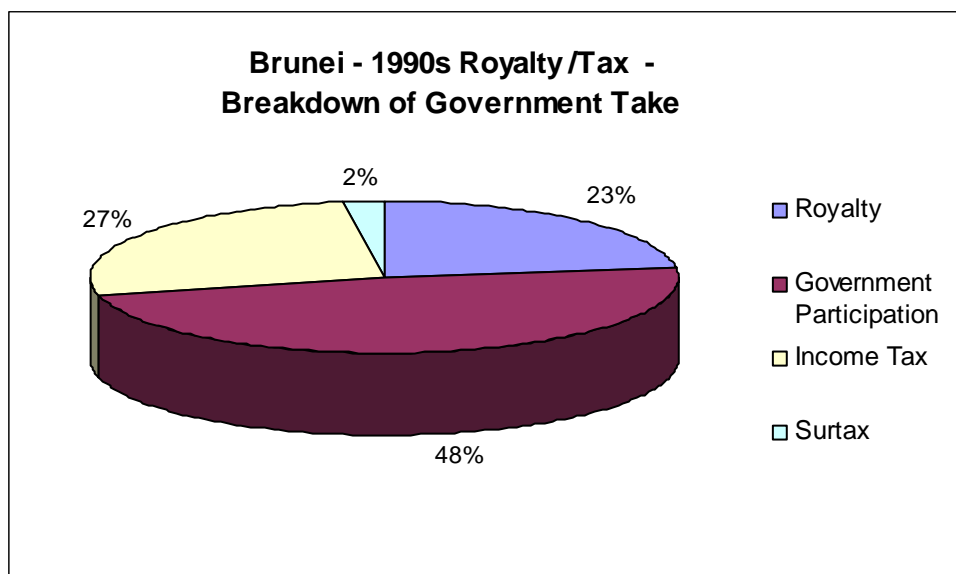
Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Government Participation – 50%
- 3) Income Tax – 55%
- 4) Surtax – 5%

- 1) Fixed rate onshore royalty of 12.5% (8% - 10% offshore)
- 2) Government Participation up to 50% (used here)
- 3) Income tax – flat rate of 55% (“Petroleum Income Tax”)
- 4) Surtax – 5% on post income tax profits (no deduction for royalty) (“Supplementary Petroleum Payment”).

Other Taxes: Negotiable Bonuses
Rentals (rates increased after 4 years)

Cost Accounting: Sliding scale cost recovery based on production levels (40-50%)
No Individual license ring-fencing
Depreciation – 4 year straight-line
Loan interest C/R limits as % total costs

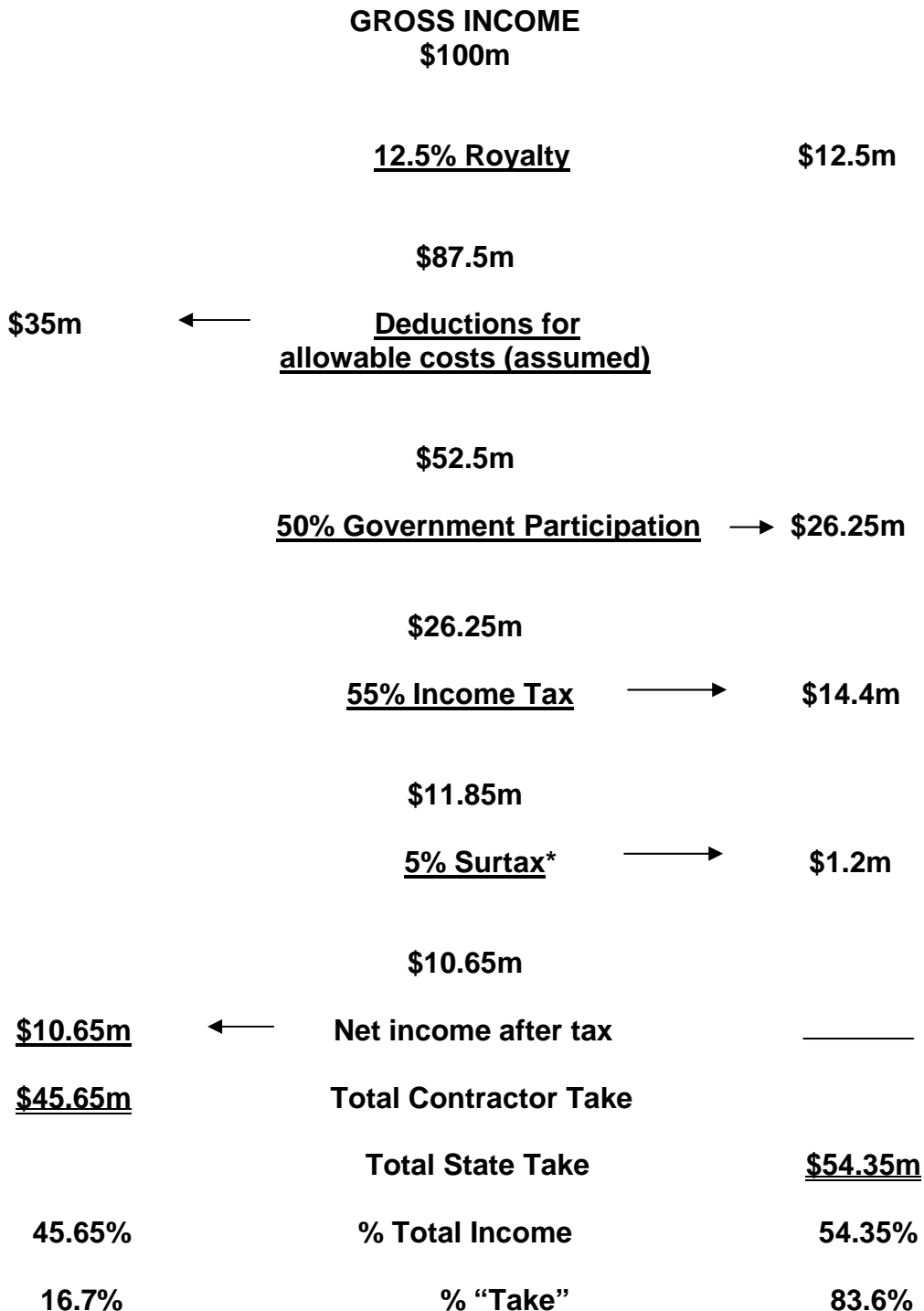


FLOW DIAGRAM FOR BRUNEI
– 1990 ROYALTY / TAX

Based on Gross Income of \$100m

Contractor Share

State Take



* = Royalty not deductible for surtax calculation purposes.

Canada – Alberta Royalty / Tax 3RD Tier Oil

Contract Type: Royalty / Tax

% Government Take: 67.7%

Core Taxes Used:

- 1) Royalty – 15%
- 2) Federal Income Tax – 15.5%
- 3) Provincial Income Tax – 28%
- 4) Provincial Surtax – 4%

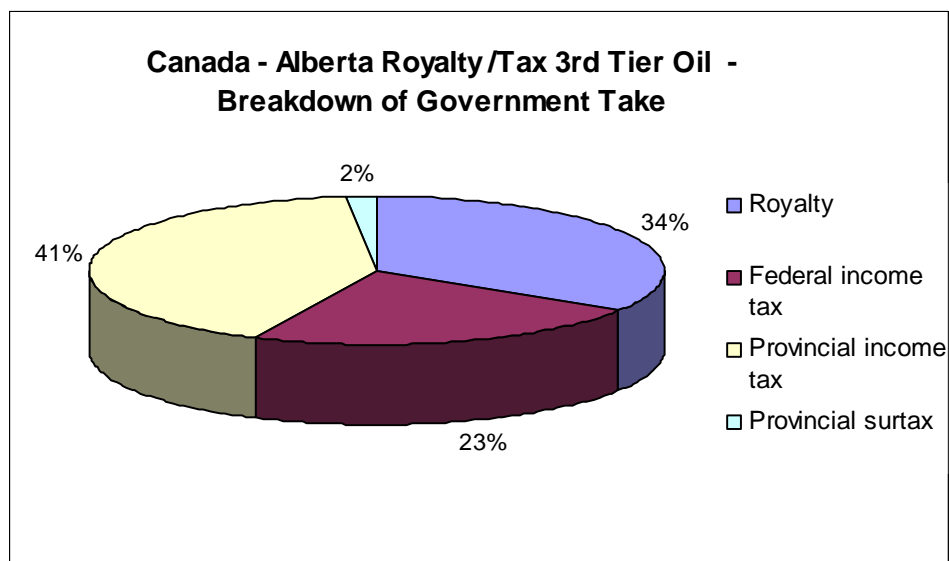
- 1) Sliding scale royalty rate based on oil prices, productivity and oil vintage. Rates up to 15% (used here).
- 2) Fixed rate federal income tax of 15%. Royalties are not deductible in calculation.
- 3) Provincial income tax – flat rate of 28%. Royalties and federal income tax not deductible.
- 4) Surtax – 4% on provincial income tax (i.e. effective rate is 1.12% on profits without deduction for royalty or other taxes).

Other Taxes:

- Bonuses
- Rentals
- Large Corporation Asset Tax (0.225% on book value)
- 10% Withholding Tax

Cost Accounting:

- Exploration costs expensed
- No Individual license ring-fencing
- Reducing Balance depreciation (25% - 30%)

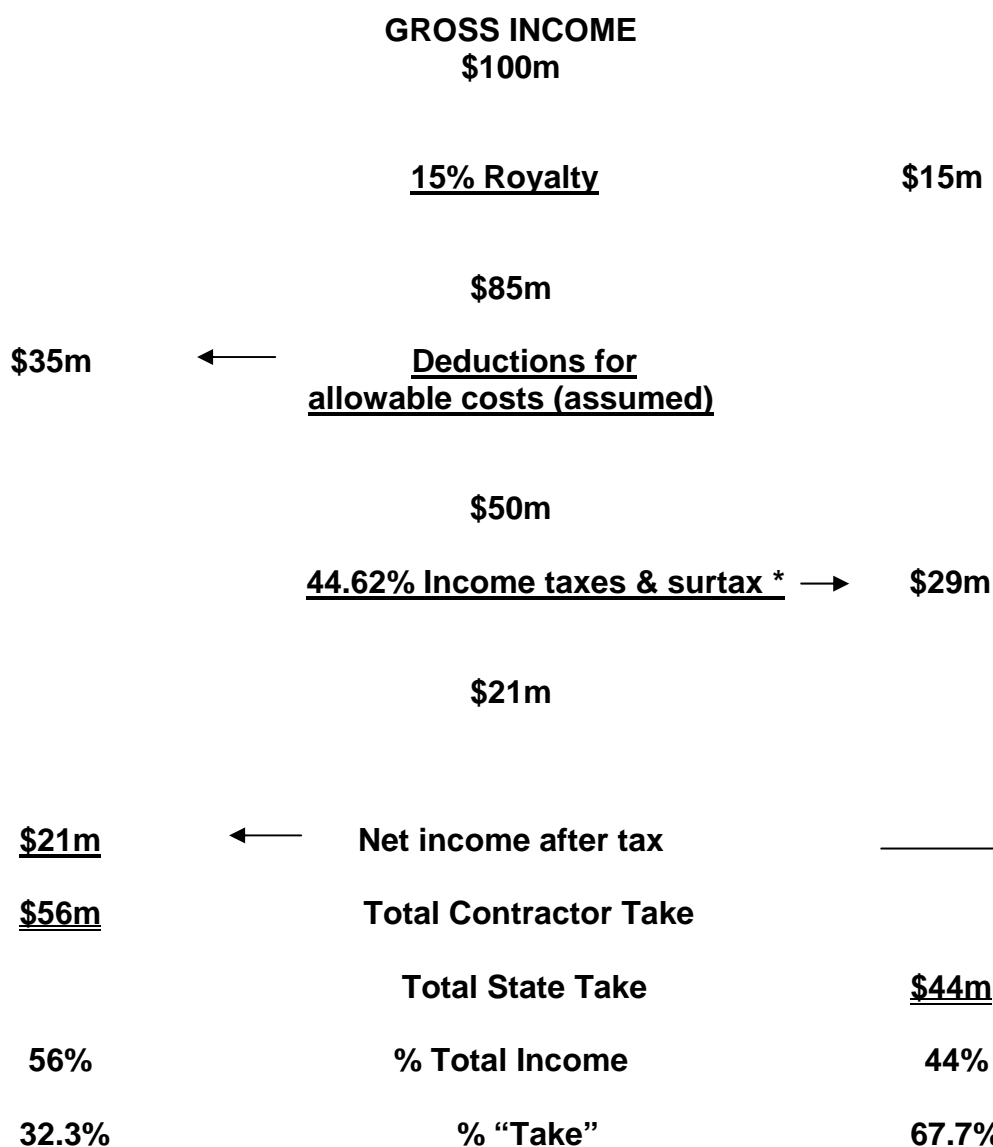


FLOW DIAGRAM FOR CANADA
– ALBERTA ROYALTY / TAX 3RD TIER OIL

Based on Gross Income of \$100m

Contractor Share

State Take



** = 15.5% Federal income tax, 28% provincial income tax (with additional surtax on provincial rate of 4% = 1.12% effective rate) all levied on profits without deduction for royalty.*

Canada – Newfoundland Royalty / Tax

Contract Type: Royalty / Tax

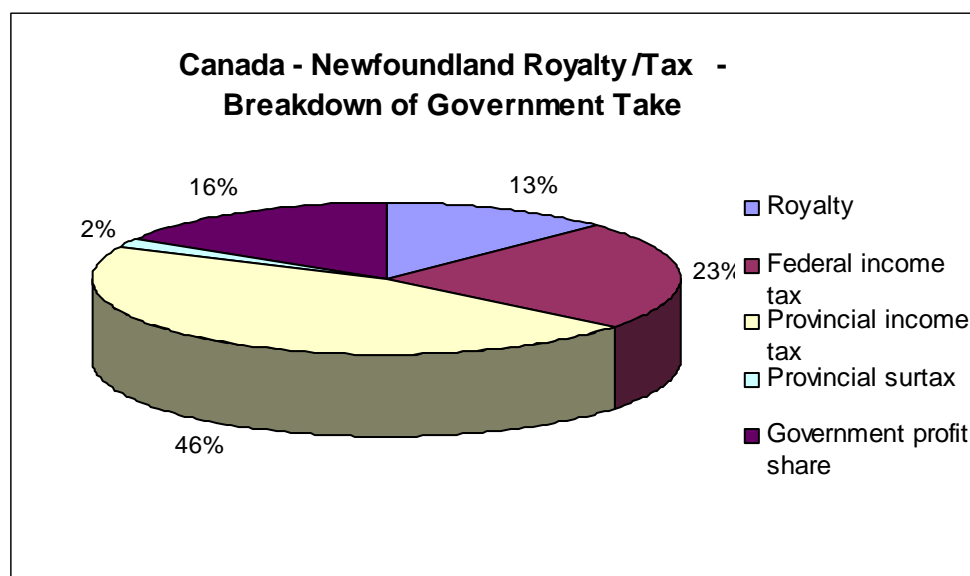
% Government Take: 60.6%

Core Taxes Used:

- 1) Royalty – 5%
- 2) Profit Share – 20%
- 3) Federal Income Tax – 14%
- 4) Provincial Income Tax – 28%
- 5) Provincial Surtax – 4%

- 1) Sliding scale royalty rate based on oil prices, productivity and oil vintage. Rates up to 7.5%. 5% used here.
- 2) 20% government profit share, based on profitability (forms part of sliding-scale royalty calculation). Maximum rate is 30%.
- 3) Fixed rate federal income tax of 15%. Royalties are not deductible in calculation.
- 4) Provincial income tax – flat rate of 28%. Royalties and federal income tax not deductible in calculation.
- 5) Surtax – 4% on provincial income tax (i.e. effective rate is 1.12% on profits without deduction for royalty or other taxes).

Cost Accounting: Individual license ring-fencing
Reducing Balance depreciation (25% - 30%)

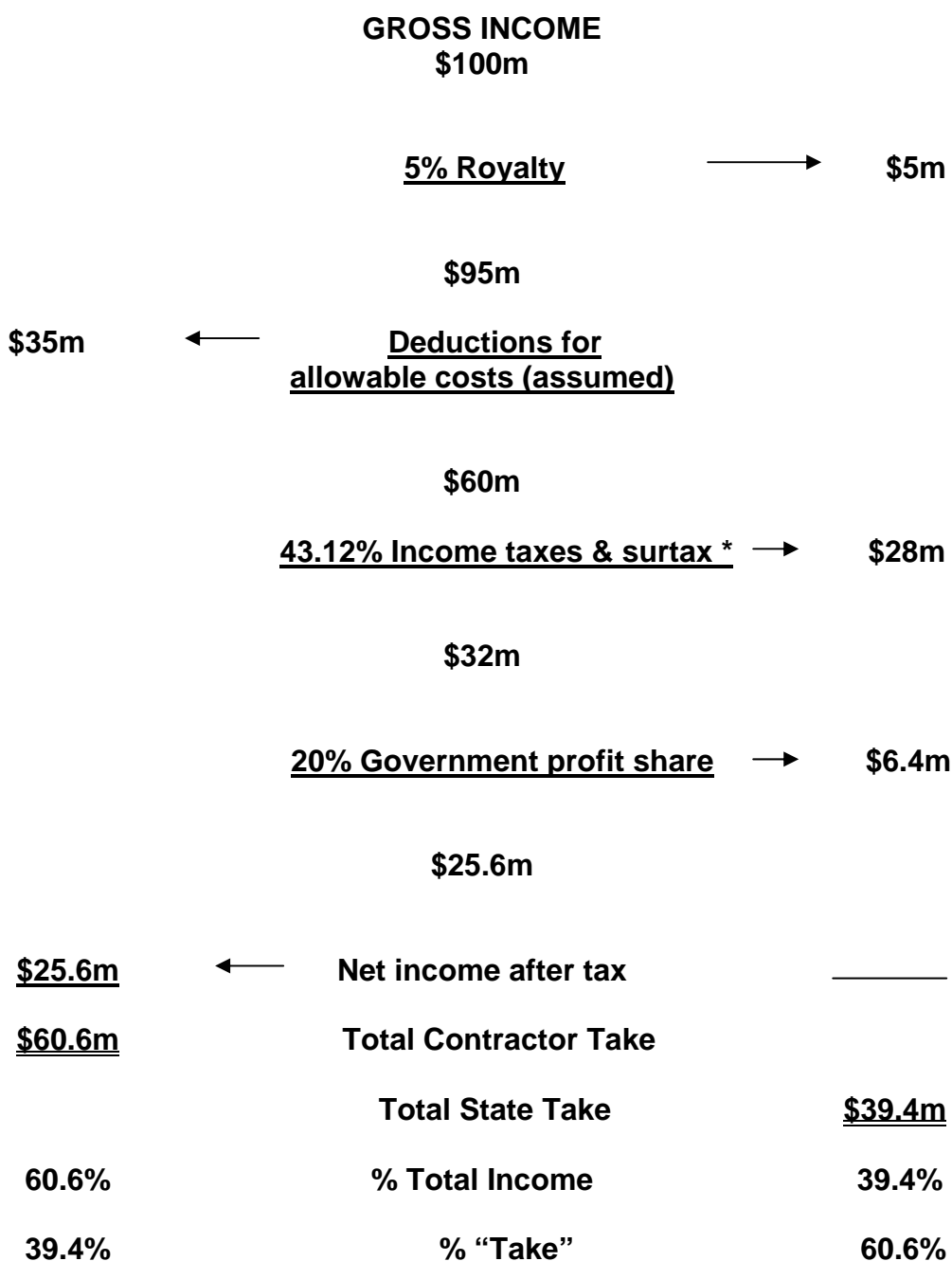


FLOW DIAGRAM FOR CANADA
– NEWFOUNDLAND ROYALTY / TAX

Based on Gross Income of \$100m

Contractor Share

State Take



** = 14% Federal income tax, 28% provincial income tax (with additional surtax on provincial rate of 4% = 1.12% effective rate) all levied on profits without deduction for royalty.*

China – 1990s Offshore Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 73.6%

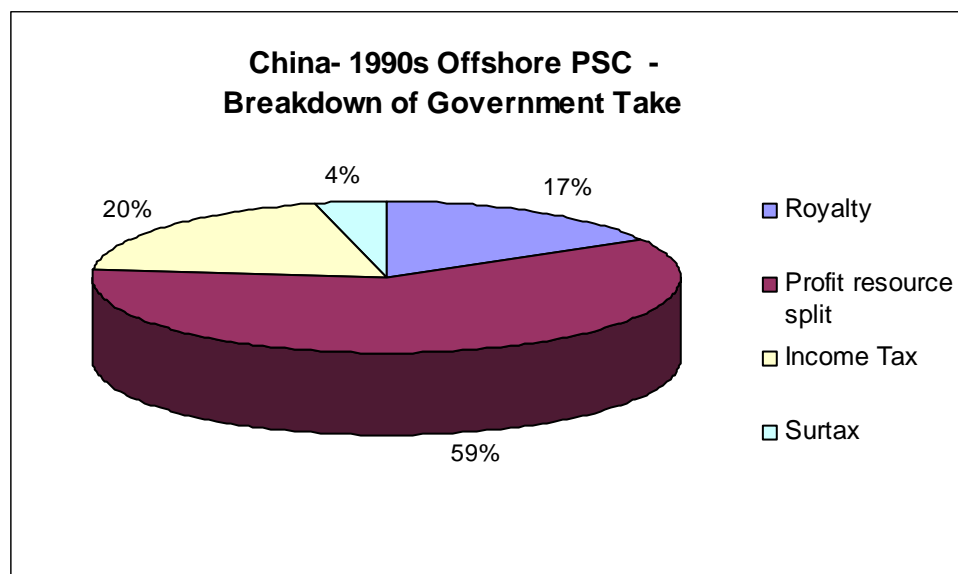
Core Taxes Used:

- 1) Royalty – 8%
- 2) Government Profit Resource share– 50%
- 3) Income Tax – 33%
- 4) Surtax – 10%

- 1) 5% fixed rate royalty (formerly called Consolidated Industrial & Commercial Tax) with additional sliding scale royalty rate based on production levels (up to 3% for gas and 12.5% for oil). 8% maximum for gas used here.
- 2) Government profit resource share calculated on production-based sliding scale ranging from 10% to 60%. 50% used here.
- 3) Federal income tax – flat rate of 30%, in addition to 3% local income tax.
- 4) Surtax – 10% fixed rate surtax on post-income tax profits.

Other Taxes: Possible Government Participation (up to 51%)
Vehicle & vessel usage taxes

Cost Accounting: Individual license ring-fencing (for cost recovery only – not tax)
All costs expensed for C/R purposes
50% - 62.5% Cost Recovery limits for C/R purposes only
Depreciation – 6 year straight line



FLOW DIAGRAM FOR CHINA
– 1990s OFFSHORE PSC

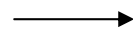
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

8% Royalty



\$8m

\$92m

\$35m



Deductions for
allowable costs (assumed)

\$57m

50% Profit Resource Split



\$28.5m

\$28.5m

33% Income Tax



\$9.4m

\$19.1m

10% Surtax



\$1.9m

\$17.2m

\$17.2m



Net income after tax



\$52.2m

Total Contractor Take

Total State Take

\$47.8m

52.2%

% Total Income

47.8%

26.4%

% "Take"

73.6%

China – 1994/95 Deepwater Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 64.6%

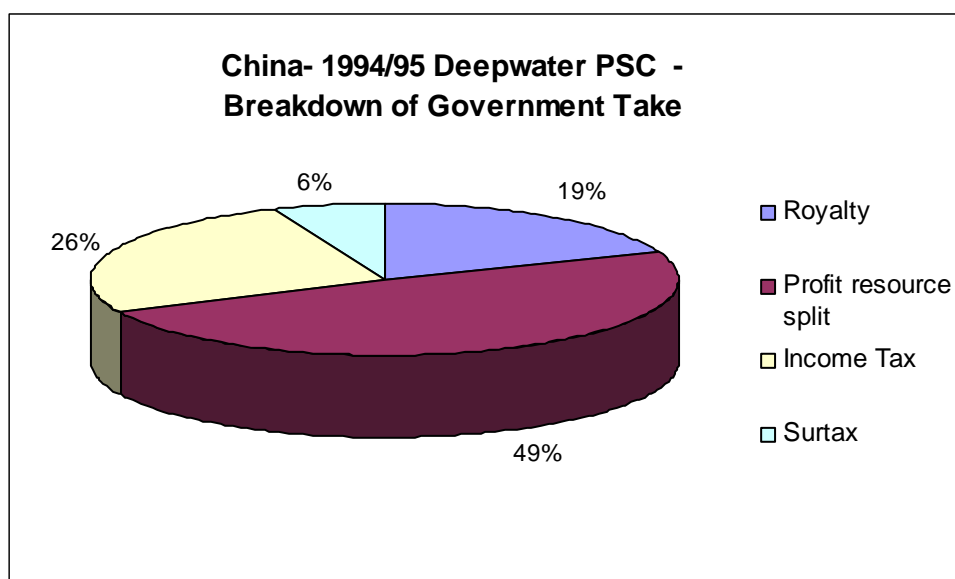
Core Taxes Used:

- 1) Royalty – 8%
- 2) Government Profit Resource share– 36%
- 3) Income Tax – 33%
- 4) Surtax – 10%

- 1) 5% fixed rate royalty (formerly called Consolidated Industrial & Commercial Tax) with additional sliding scale royalty rate based on production levels (up to 3% for gas and 12.5% for oil). 8% maximum for gas used here.
- 2) Government profit resource share calculated on production-based sliding scale ranging from 3% to 45%. 36% used here.
- 3) Income tax – flat rate of 30%.
- 4) Surtax – 10% fixed rate surtax on post-income tax profits.

Other Taxes: Possible Government Participation (up to 51%)
Vehicle & vessel usage taxes

Cost Accounting: Individual license ring-fencing (for cost recovery only – not tax)
All costs expensed for C/R purposes
50% Cost Recovery limits for C/R purposes only
Depreciation – 6 year straight line

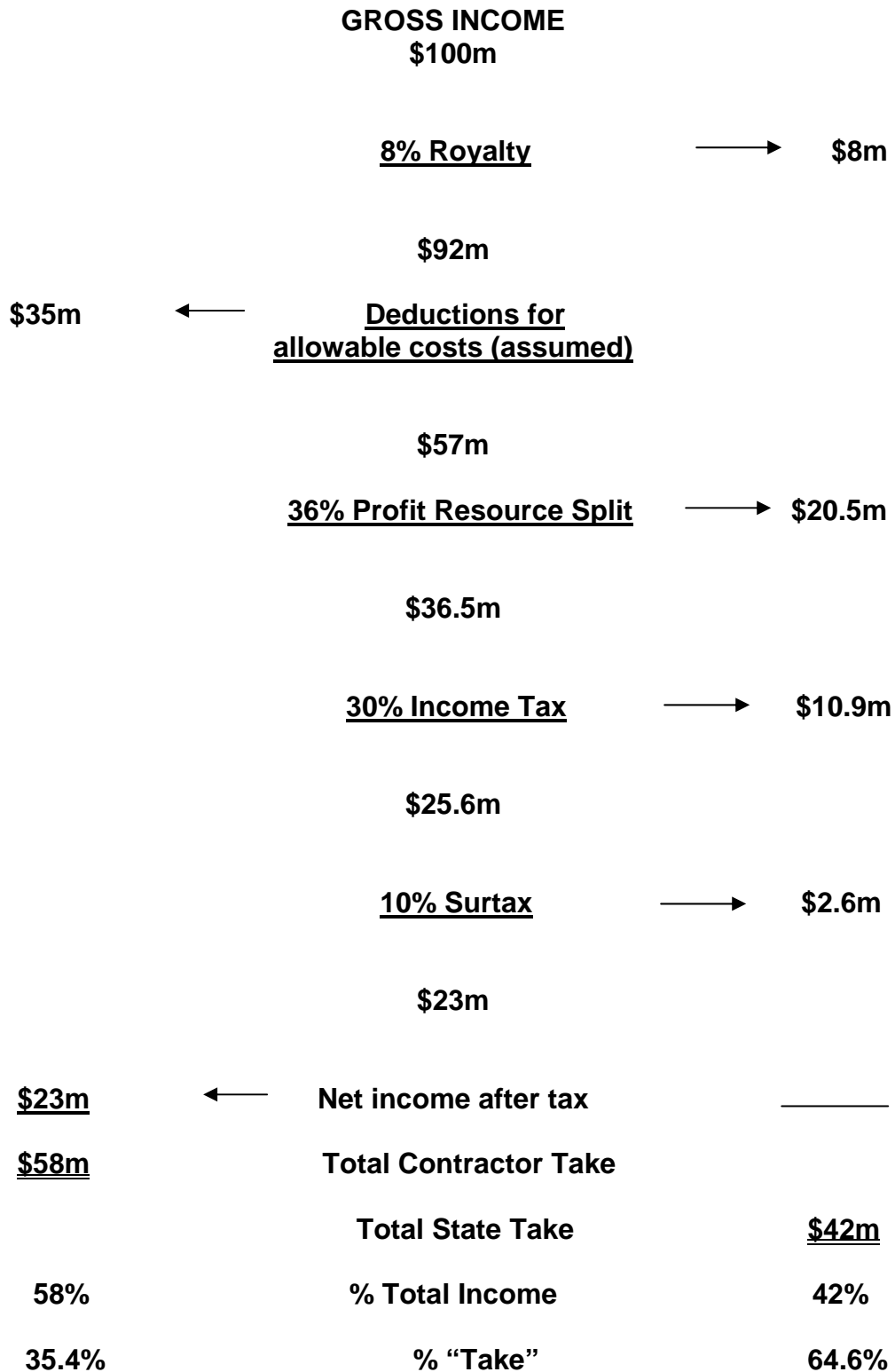


FLOW DIAGRAM FOR CHINA
– 1994/95 DEEPWATER PSC

Based on Gross Income of \$100m

Contractor Share

State Take



China – Onshore Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 76.8%

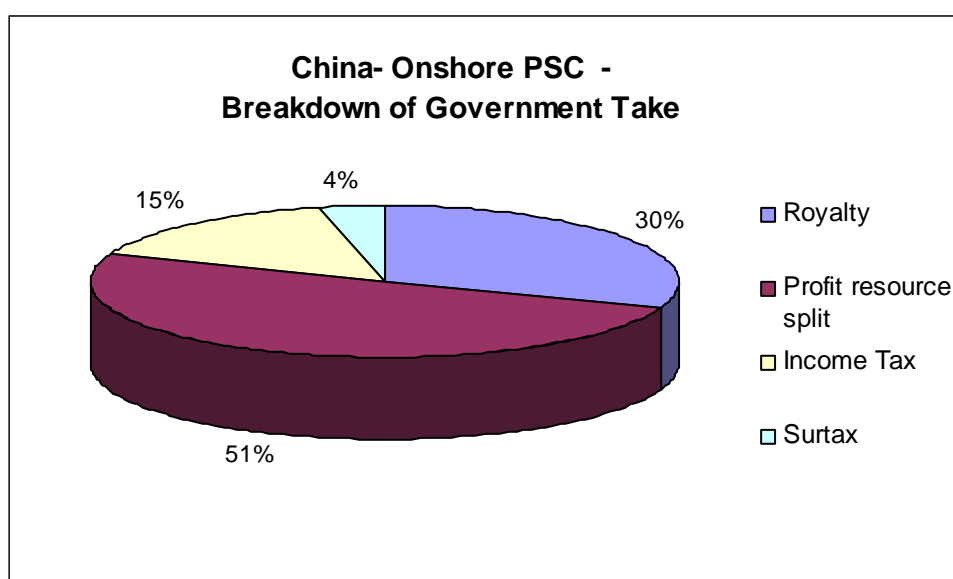
Core Taxes Used:

- 1) Royalty – 15%
- 2) Government Profit Resource share– 36%
- 3) Income Tax – 33%
- 4) Surtax – 10%

- 1) 5% fixed rate royalty with additional sliding scale royalty rate based on production levels (up to 12.5%). 15% used here.
- 2) Government profit resource share calculated on production-based sliding scale ranging from 10% to 60%. 50% used here.
- 3) Income tax – federal flat rate of 30%, in addition to 3% local rate.
- 4) Surtax – 10% fixed rate surtax on post-income tax profits.

Other Taxes: Possible Government Participation (up to 51%)
Vehicle & vessel usage taxes

Cost Accounting: Individual license ring-fencing
All costs expensed for C/R purposes
60% Cost Recovery limits
Depreciation – 6 year straight line



FLOW DIAGRAM FOR CHINA
– ONSHORE PSC

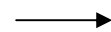
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

15% Royalty



\$15m

\$85m

\$35m



Deductions for
allowable costs (assumed)

\$50m

50% Profit Resource Split



\$25m

\$25m

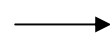
33% Income Tax



\$8.3m

\$16.7m

10% Surtax



\$1.7m

\$15m

\$15m



Net income after tax

\$50m

Total Contractor Take

Total State Take

\$50m

50%

% Total Income

50%

23.2%

% “Take”

76.8%

China – 1997 EOR Project

Contract Type: Production Sharing Contract

% Government Take: 83.5%

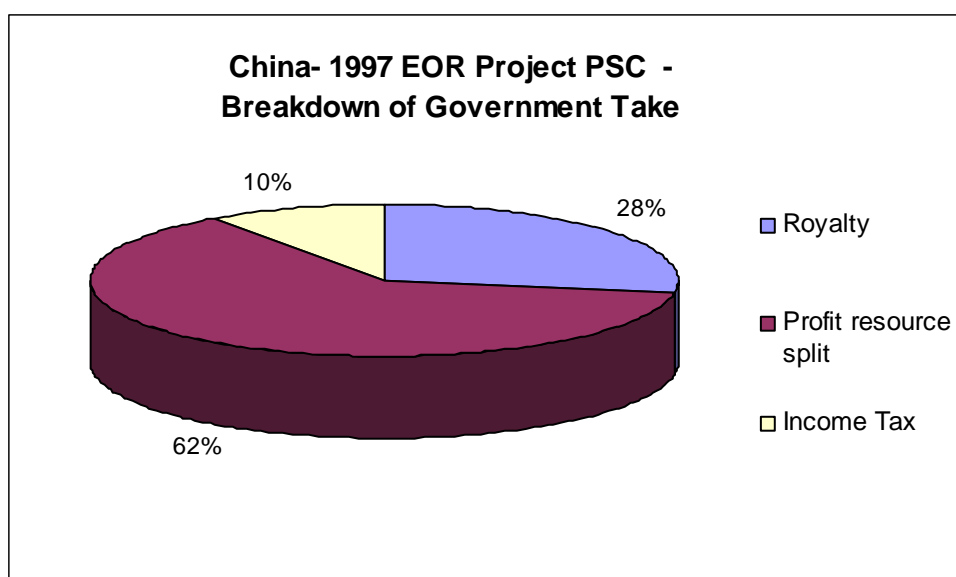
Core Taxes Used:

- 1) Royalty – 15%
- 2) Government Profit Resource share – 40%
- 3) Income Tax – 33%

- 1) 5% fixed rate royalty with additional sliding scale royalty rate based on production levels (up to 12.5%). 15% used here.
- 2) Government profit resource share calculated on higher of 40% pre-cost recovery and 50% post-cost recovery figures.
- 3) Income tax – federal flat rate of 30%, in addition to 3% local rate.

Other Taxes: Possible Government Participation (up to 51%)
Signature Bonuses

Cost Accounting: Individual license ring-fencing
All costs expensed for C/R purposes
70% Cost Recovery limits

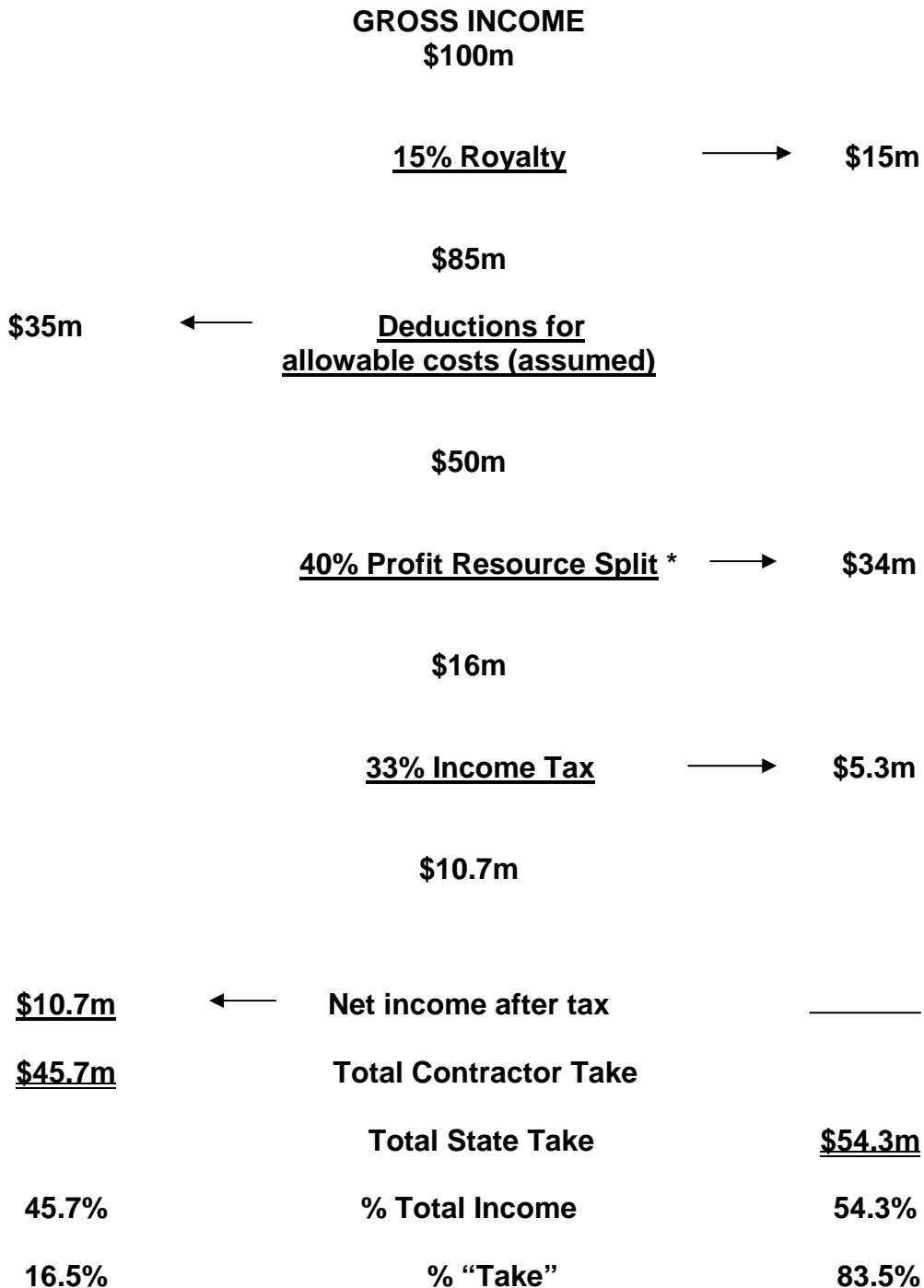


FLOW DIAGRAM FOR CHINA
– 1997 EOR PROJECT PSC

Based on Gross Income of \$100m

Contractor Share

State Take



Denmark – 1997 Royalty / Tax

Contract Type: Royalty / Tax

% Government Take: 65.6%

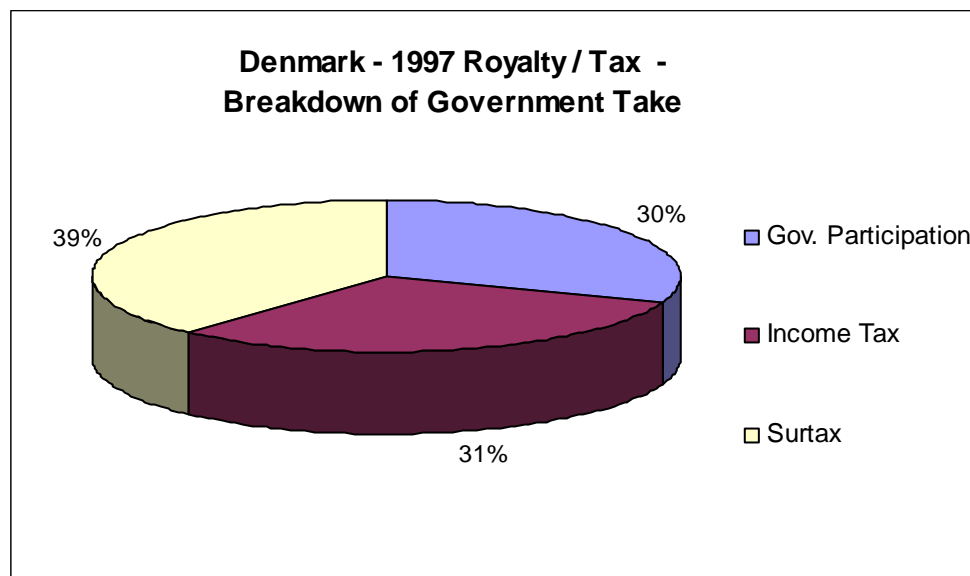
Core Taxes Used:

- 1) Government Participation – 20%
- 2) Income Tax – 34%
- 3) Surtax – 70%

- 1) Government participation of 20% - could increase based on levels of production.
- 2) Income tax – flat rate of 34%
- 3) Surtax – “Hydrocarbon tax” levied at 70% on post-income tax profits, with 25% uplift for deductions.

Other Taxes: 5% Withholding Tax
Pipeline tariffs (as % gross revenues)

Cost Accounting: Individual license ring-fencing for surtax purposes only
Depreciation during exploration – 5 year straight line
Depreciation during development – 30% reducing balance

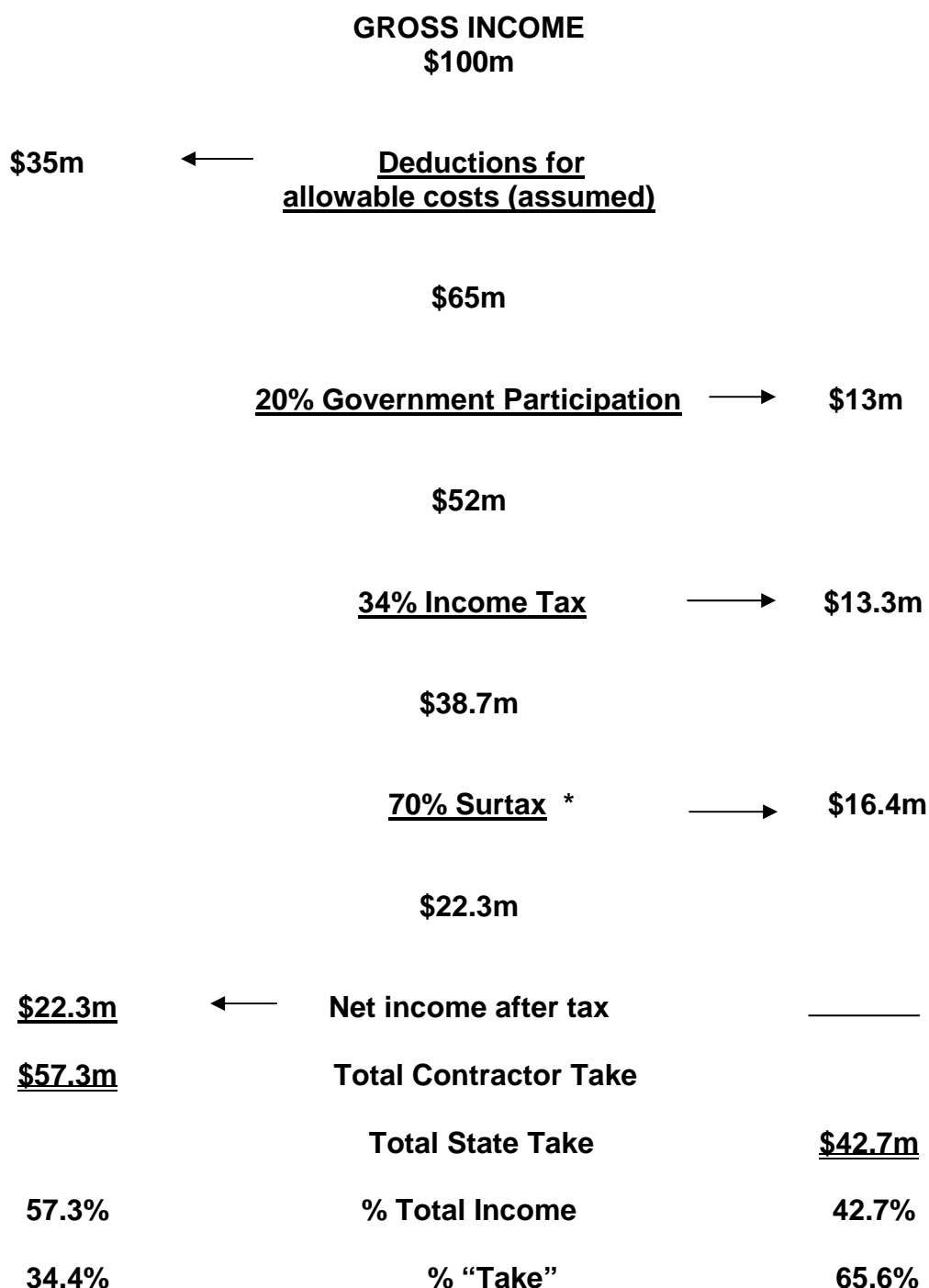


FLOW DIAGRAM FOR DENMARK
– 1997 ROYALTY TAX

Based on Gross Income of \$100m

Contractor Share

State Take



** = 70% on post-income tax profits, with additional 25% uplift for all deductions. Effective rate here = 42%.*

Egypt – 1974 Deminex/ Shell/ BP “SUCO” Agreement

Contract Type: Production Sharing Contract

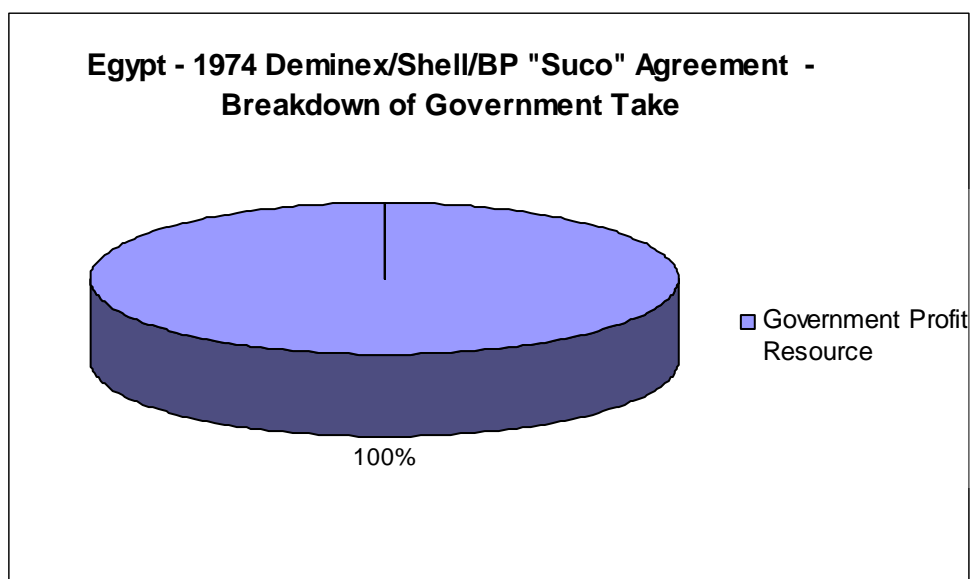
% Government Take: 80%

Core Taxes Used: 1) Profit Resource Share – 80%

- 1) Fixed government profit resource share of 80% (for oil – gas may be negotiated, but no specific figures given).

Other Taxes: Signature Bonuses
Production Bonuses

Cost Accounting: Individual license ring-fencing for
Depreciation – 5/10 year straight line
40% cost recovery limits



FLOW DIAGRAM FOR EGYPT
– 1974 DEMINEX / SHELL / BP “SUCO” AGREEMENT

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

80% Government Profit Resource → **\$52m**

\$13m

\$13m



Net income after tax



\$48m

Total Contractor Take

Total State Take

\$52m

48%

% Total Income

52%

20%

% “Take”

80%

Egypt – 1974 Deminex/ Shell/ BP “DEOCO” Agreement

Contract Type: Production Sharing Contract

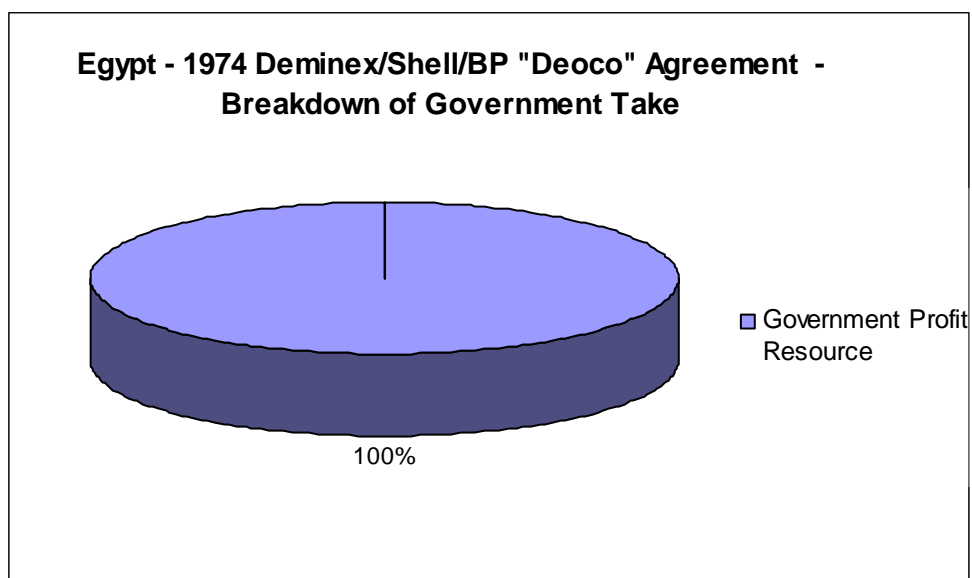
% Government Take: 82.5%

Core Taxes Used: 1) Profit Resource Share – 82.5%

- 1) Fixed government profit resource share of 82.5% (for oil – gas may be negotiated, but no specific figures given).

Other Taxes: Signature Bonuses
Production Bonuses

Cost Accounting: Individual license ring-fencing
Depreciation – 5/10 year straight line
40% cost recovery limits



FLOW DIAGRAM FOR EGYPT
– 1974 DEMINEX / SHELL / BP “DEOCO” CONTRACT

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

80% Government Profit Resource



\$53.6m

\$11.4m

\$11.4m



Net income after tax



\$46.4m

Total Contractor Take

Total State Take

\$53.6m

46.4%

% Total Income

53.6%

17.5%

% “Take”

82.5%

Egypt – Norsk Hydro – Kufpec – Ras El Hekma
Production Sharing Contract

Contract Type: Production Sharing Contract

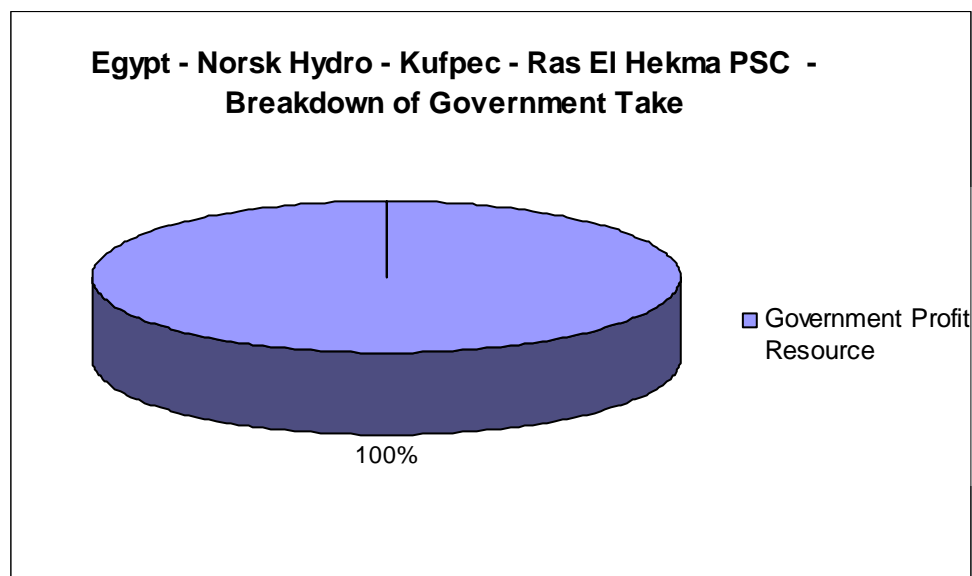
% Government Take: 78%

Core Taxes Used: 1) Profit Resource Share – 78%

- 1) Fixed government profit resource share of 78% (for gas – oil is on sliding scale based on production levels from 70% to 80%).

Other Taxes: Signature Bonuses
Production Bonuses
Rentals

Cost Accounting: Individual license ring-fencing
Depreciation – 4 year straight line
40% cost recovery limits



FLOW DIAGRAM FOR EGYPT
– NORSK HYDRO – KUFPEC – RAS EL HEKMA PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

78% Government Profit Resource



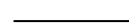
\$50.7m

\$14.3m

\$14.3m



Net income after tax



\$49.3m

Total Contractor Take

Total State Take

\$50.7m

49.3%

% Total Income

50.7%

22%

% “Take”

78%

Egypt – 1984 Typical Production Sharing Contract

Contract Type: Production Sharing Contract

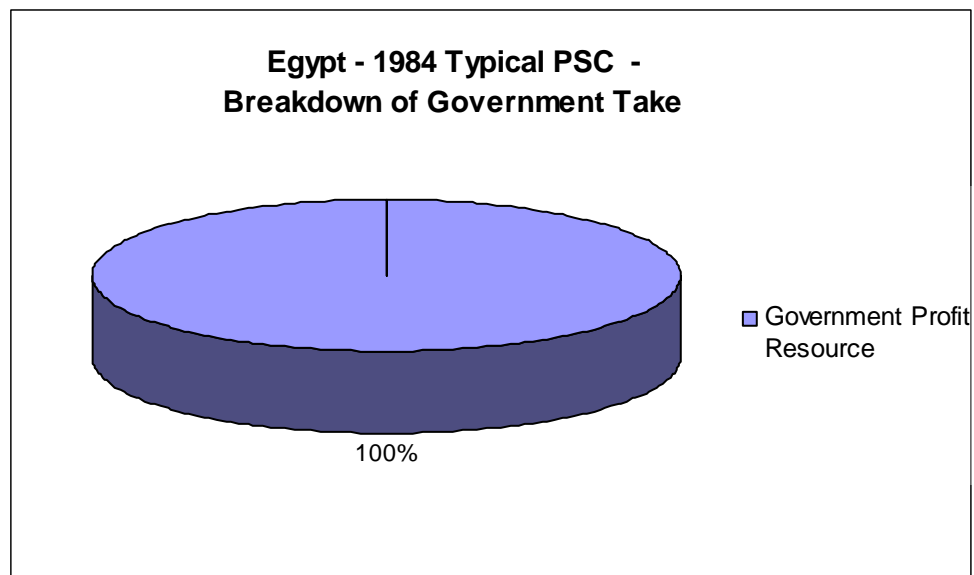
% Government Take: 82.5%

Core Taxes Used: 1) Profit Resource Share – 82.5%

- 1) Sliding scale government profit resource share based on production levels (for oil – ranging from 80% to 85%, 82.5% used here). Gas figures unspecified and subject to negotiation.

Other Taxes: Signature Bonuses
Production Bonuses

Cost Accounting: Individual license ring-fencing
Depreciation – 8 year straight line
30% cost recovery limits



FLOW DIAGRAM FOR EGYPT
– 1984 TYPICAL PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

82.5% Government Profit Resource



\$53.6m

\$11.4m

\$11.4m



Net income after tax



\$46.4m

Total Contractor Take

Total State Take

\$53.6m

46.4%

% Total Income

53.6%

17.5%

% “Take”

82.5%

Egypt – 1986 Standard Production Sharing Contract

Contract Type: Production Sharing Contract

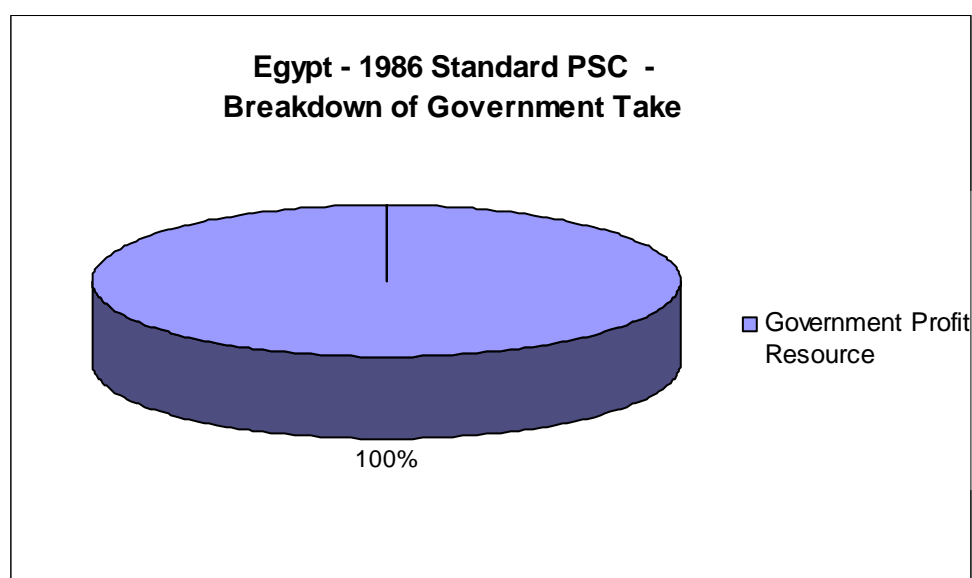
% Government Take: 85%

Core Taxes Used: 1) Profit Resource Share – 85%

- 1) Sliding scale government profit resource share based on production levels (for oil – ranging from 80% to 85%). Low production thresholds mean that most licenses subject to maximum 85%/15% split (used here). Gas figures unspecified and subject to negotiation.

Other Taxes: Signature Bonuses
Production Bonuses
Obligations – for each discovery, must drill further prospect

Cost Accounting: Individual license ring-fencing
Depreciation – 5 year straight line
30% cost recovery limits (40% offshore)



FLOW DIAGRAM FOR EGYPT
– 1986 TYPICAL PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

85% Government Profit Resource



\$55.25m

\$9.75m

\$9.75m



Net income after tax



\$44.75m

Total Contractor Take

Total State Take

\$55.25m

44.75%

% Total Income

55.25%

15%

% “Take”

85%

Egypt– 1989 Amoco Production Sharing Contract

Contract Type: Production Sharing Contract

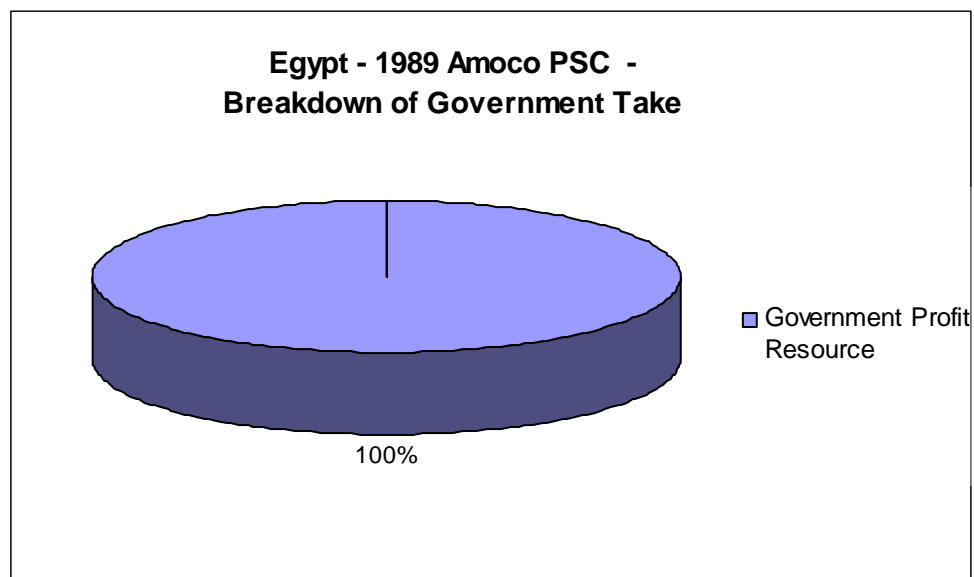
% Government Take: 80%

Core Taxes Used: 1) Profit Resource Share – 80%

- 1) Sliding scale government profit resource share based on production levels (for oil – ranging from 80% to 85%). Gas figure fixed at 80%.

Other Taxes: Signature Bonuses
Production Bonuses

Cost Accounting: Individual license ring-fencing
Depreciation – 5 year straight line
40% cost recovery limit



FLOW DIAGRAM FOR EGYPT
– 1989 AMOCO PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

80% Government Profit Resource



\$52m

\$13m

\$13m



Net income after tax



\$48m

Total Contractor Take

Total State Take

\$52m

48%

% Total Income

52%

20%

% “Take”

80%

Egypt – 1994 Vintage (West Desert) Production Sharing Contract

Contract Type: Production Sharing Contract

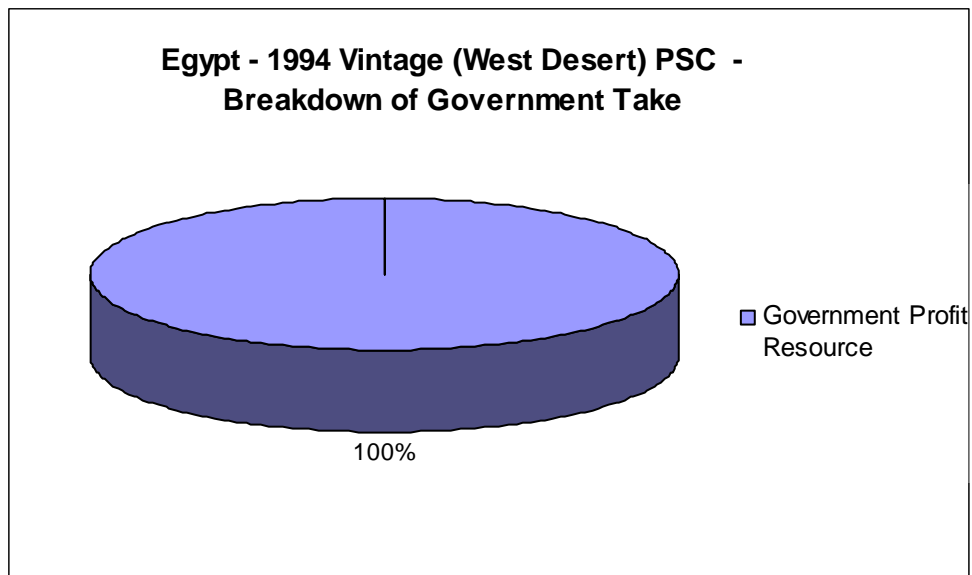
% Government Take: 80%

Core Taxes Used: 1) Profit Resource Share – 80%

- 1) Sliding scale government profit resource share based on production levels (ranging from 75% to 83% for oil and 75% to 85% for gas). 80% used here.

Other Taxes: Signature Bonuses
Production Bonuses
Discovery Bonuses

Cost Accounting: Individual license ring-fencing
Depreciation – 5 year straight line
30% (40% offshore) cost recovery limit



FLOW DIAGRAM FOR EGYPT
– 1994 VINTAGE (WEST DESERT) PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

80% Government Profit Resource



\$52m

\$13m

\$13m



Net income after tax



\$48m

Total Contractor Take

Total State Take

\$52m

48%

% Total Income

52%

20%

% “Take”

80%

Egypt – 1994 Vintage (East Desert) Production Sharing Contract

Contract Type: Production Sharing Contract

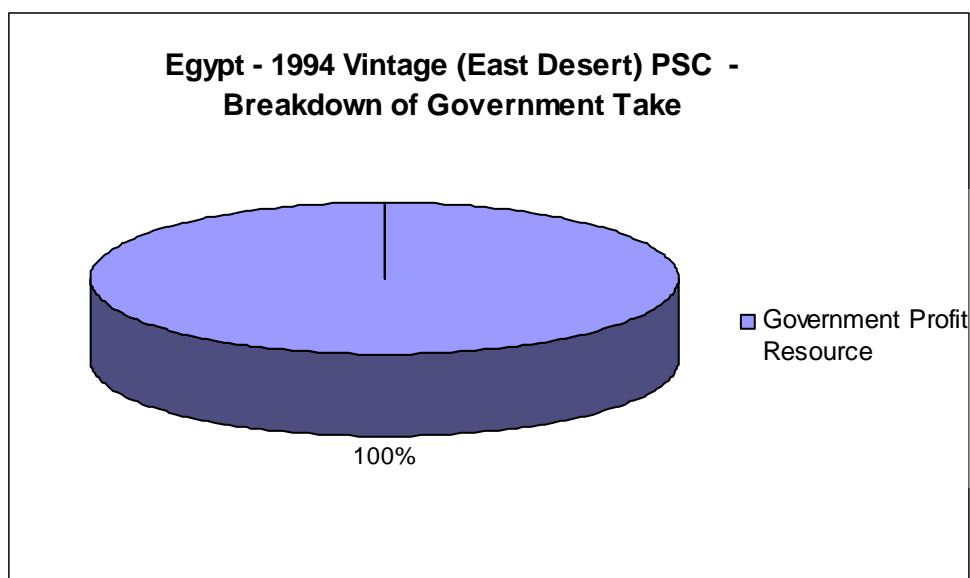
% Government Take: 80%

Core Taxes Used: 1) Profit Resource Share – 80%

- 1) Sliding scale government profit resource share based on production levels (ranging from 75% to 83% for oil and 75% to 85% for gas). 80% used here.

Other Taxes: Signature Bonuses
Production Bonuses
Discovery Bonuses

Cost Accounting: Individual license ring-fencing
Depreciation – 5 year straight line
30% (40% offshore) cost recovery limit



FLOW DIAGRAM FOR EGYPT
– 1994 VINTAGE (EAST DESERT) PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

80% Government Profit Resource



\$52m

\$13m

\$13m



Net income after tax



\$48m

Total Contractor Take

Total State Take

\$52m

48%

% Total Income

52%

20%

% “Take”

80%

Egypt – 1994 Vintage (Suez) Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 80%

Core Taxes Used: 1) Profit Resource Share – 80%

- 1) Sliding scale government profit resource share based on production levels (ranging from 75% to 83% for oil and 75% to 85% for gas). 80% used here.

Other Taxes: Signature Bonuses
Production Bonuses
Discovery Bonuses

Cost Accounting: Individual license ring-fencing
Depreciation – 5 year straight line
30% (40% offshore) cost recovery limit



FLOW DIAGRAM FOR EGYPT
– 1994 VINTAGE (SUEZ) PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

80% Government Profit Resource



\$52m

\$13m

\$13m



Net income after tax



\$48m

Total Contractor Take

Total State Take

\$52m

48%

% Total Income

52%

20%

% “Take”

80%

Egypt – 1994 Vintage (Red Sea) Production Sharing Contract

Contract Type: Production Sharing Contract

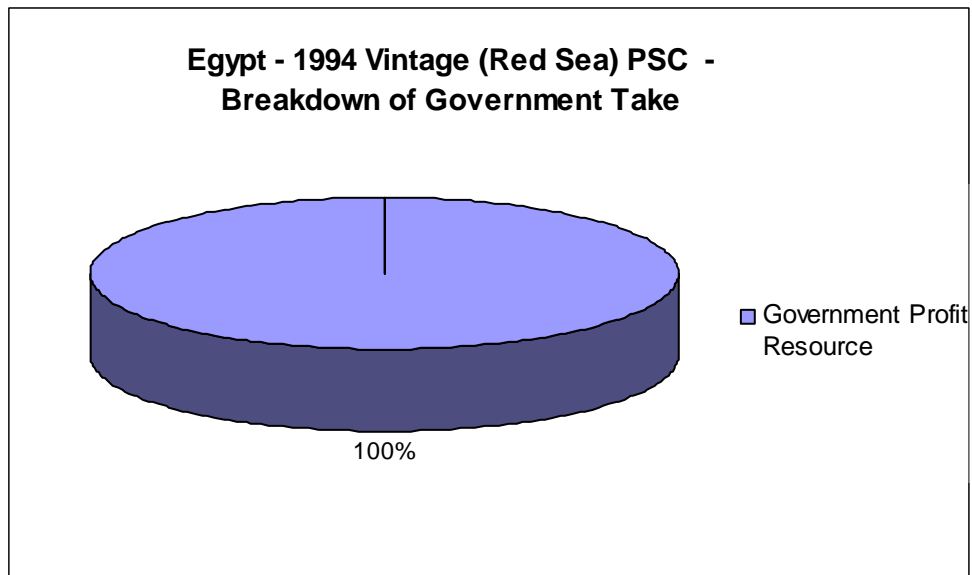
% Government Take: 65%

Core Taxes Used: 1) Profit Resource Share – 65%

- 1) Sliding scale government profit resource share based on production levels (ranging from 60% to 65% for oil). 65% used here.

Other Taxes: Signature Bonuses
Production Bonuses
Discovery Bonuses

Cost Accounting: Individual license ring-fencing
Depreciation – 5 year straight line
30% (40% offshore) cost recovery limit



FLOW DIAGRAM FOR EGYPT
– 1994 VINTAGE (RED SEA) PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

65% Government Profit Resource



\$42.25m

\$22.25m

\$22.25m



Net income after tax



\$57.25m

Total Contractor Take

Total State Take

\$42.25m

57.25%

% Total Income

42.25%

35%

% “Take”

65%

Egypt – 1994 Vintage (Deepwater) Production Sharing Contract

Contract Type: Production Sharing Contract

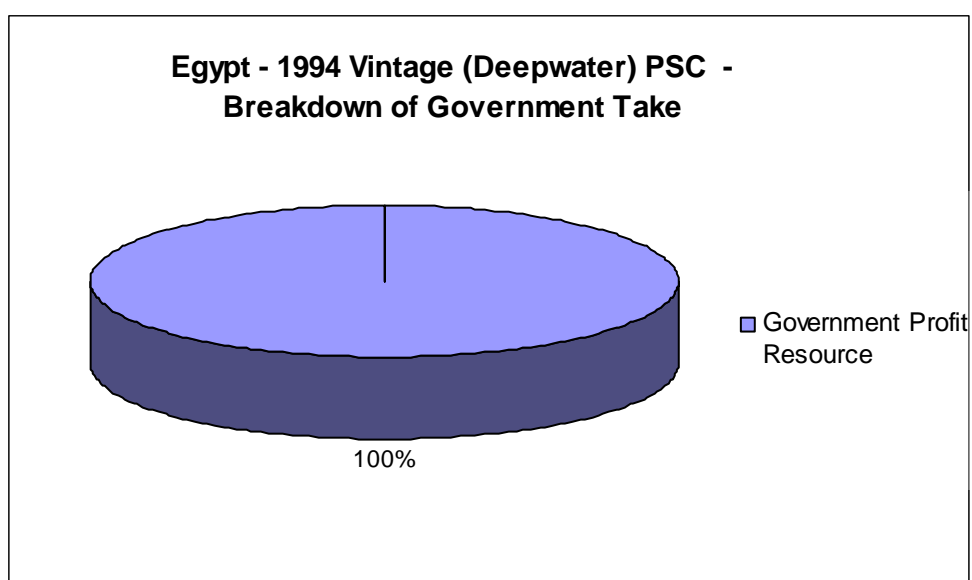
% Government Take: 70%

Core Taxes Used: 1) Profit Resource Share – 70%

- 1) Sliding scale government profit resource share based on production levels (ranging from 60% to 75% for oil). 70% used here.

Other Taxes: Signature Bonuses
Production Bonuses
Discovery Bonuses

Cost Accounting: Individual license ring-fencing
Depreciation – 5 year straight line
30% (40% offshore) cost recovery limit



FLOW DIAGRAM FOR EGYPT
– 1994 VINTAGE (DEEPWATER) PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

70% Government Profit Resource



\$45.5m

\$19.5m

\$19.5m



Net income after tax



\$54.5m

Total Contractor Take

Total State Take

\$45.5m

54.5%

% Total Income

45.5%

30%

% “Take”

70%

Egypt – 1997 Alliance International Production Sharing Contract

Contract Type: Production Sharing Contract

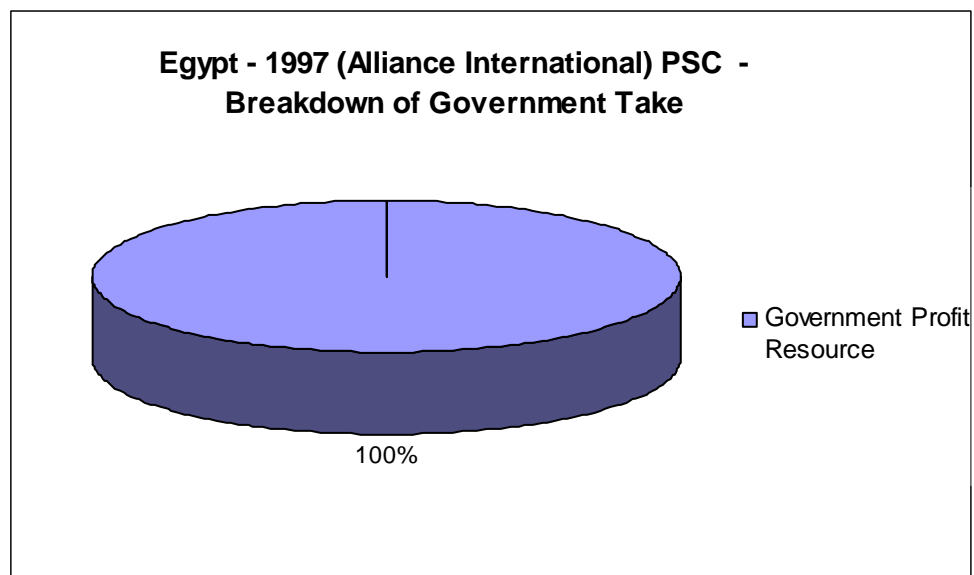
% Government Take: 81%

Core Taxes Used: 1) Profit Resource Share – 81%

- 1) Sliding scale government profit resource share based on production levels (ranging from 74% to 85% for oil). 81% used here. Gas figures negotiated.

Other Taxes: Signature Bonuses
Production Bonuses

Cost Accounting: Individual license ring-fencing
Depreciation – 4 year straight line
35% cost recovery limit



FLOW DIAGRAM FOR EGYPT
– 1997 ALLIANCE INTERNATIONAL PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

81% Government Profit Resource



\$52.6m

\$12.4m

\$12.4m



Net income after tax



\$47.4m

Total Contractor Take

Total State Take

\$52.6m

47.4%

% Total Income

52.6%

19%

% “Take”

81%

Georgia – 1997 EOR Production Sharing Contract

Contract Type: Production Sharing Contract

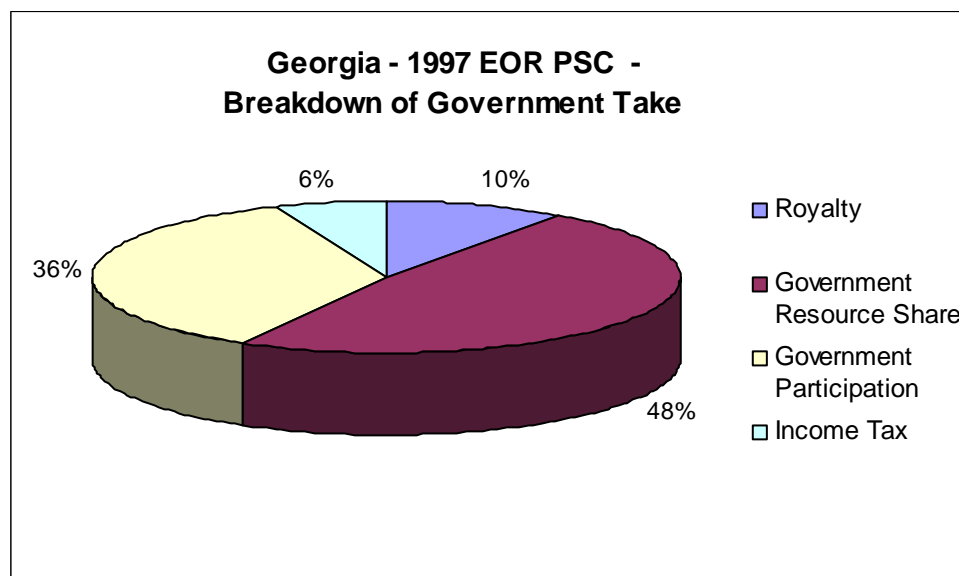
% Government Take: 77%

Core Taxes Used:

- 1) Royalty – 5%
- 2) Profit Resource Share – 40%
- 3) Government Participation – 50%
- 4) Income Tax – 17%

- 1) Fixed rate royalty of 5% (increased to 7% in year 2000)
- 2) 40% fixed rate government resource split
- 3) 50% government participation through national oil company
- 4) Income tax rate of 17% (full holiday in year1 and 50% holiday in next 3 years)

Cost Accounting: Individual license ring-fencing
50% cost recovery limit



FLOW DIAGRAM FOR GEORGIA
– 1997 EOR PSC

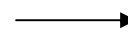
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

5% Royalty



\$5m

\$35m



Deductions for
allowable costs (assumed)

\$60m

40% Government Profit Resource



\$24m

\$36m

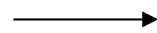
50% Government Participation



\$18m

\$18m

17% Income Tax



\$3m

\$15m

\$15m



Net income after tax

\$50m

Total Contractor Take

Total State Take

\$50m

50%

% Total Income

50%

23%

% "Take"

77%

Holland – 1990s Offshore Royalty / Tax

Contract Type: Royalty / Tax

% Government Take: 83.5%

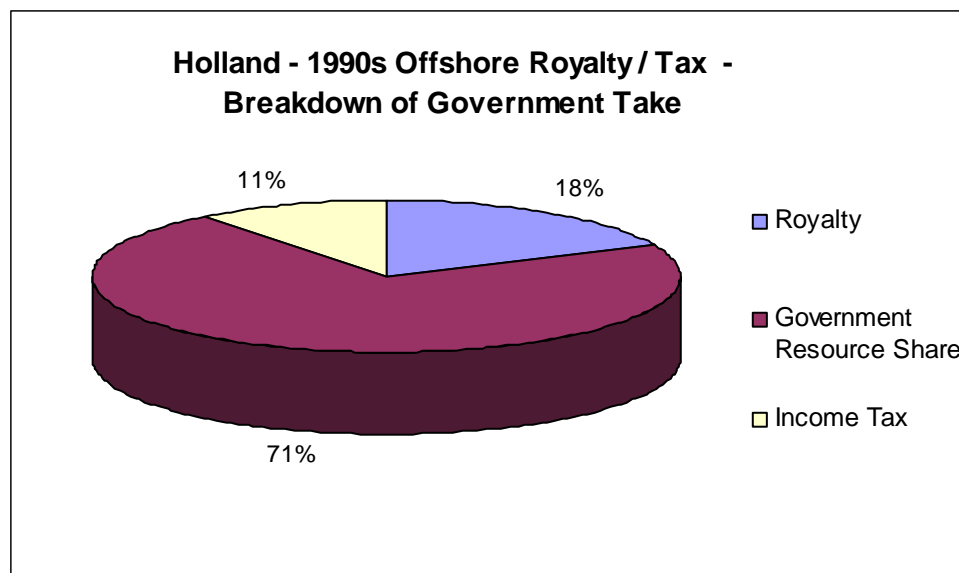
Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit Resource Share – 70%
- 3) Income Tax – 35%

- 1) Sliding scale royalty based on production levels – ranges from 0-15%. 10% used here.
- 2) 70% fixed rate “State Profit Share.” Includes Government participation share of up to 40% (for which exploration and appraisal costs + interest are repaid).
- 3) 35% flat rate income tax, after deduction for State Profit Tax. Uplifts granted for development and operating costs (70% and 20% respectively).

Other Taxes: Bonuses
5% Withholding Tax

Cost Accounting: No Individual license ring-fencing
All costs expensed (no depreciation)



FLOW DIAGRAM FOR HOLLAND
– 1990s OFFSHORE ROYALTY / TAX

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10% Royalty → **\$10m**

\$35m ← **Deductions for**
allowable costs (assumed)

\$55m

70% Government Profit Resource → **\$38.5m**

\$16.5m

35% Income Tax → **\$5.8m**

\$10.7m

\$10.7m ← **Net income after tax** _____

\$45.7m **Total Contractor Take**

Total State Take **\$54.3m**

45.7% **% Total Income** **54.3%**

16.5% **% “Take”** **83.5%**

India – Late 1980s Various Production Sharing Contracts

Contract Type: Production Sharing Contract

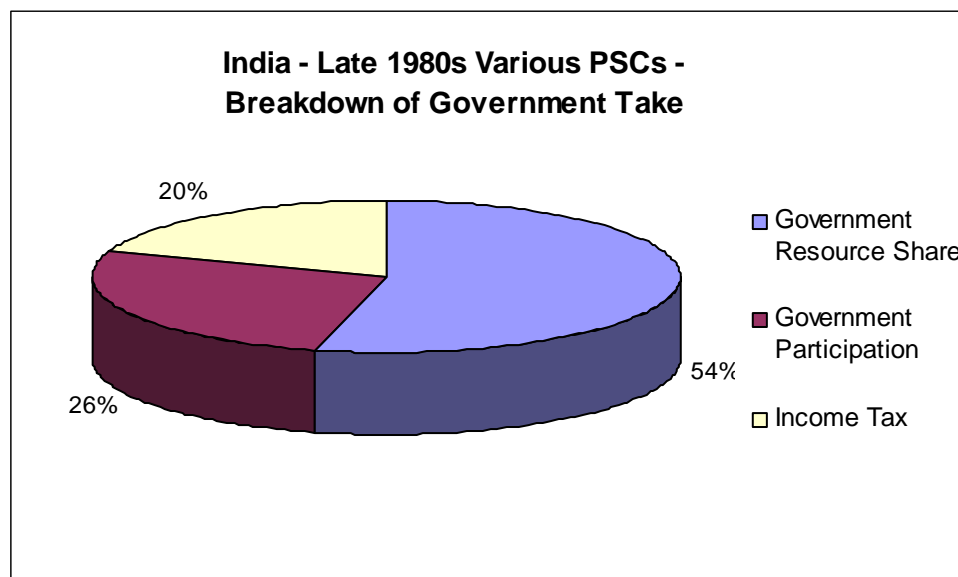
% Government Take: 79%

Core Taxes Used:

- 1) Profit Resource Share – 30%
- 2) Government Participation – 40%
- 3) Income Tax – 50%

- 1) Sliding scale resource share based on “Investment multiple” (similar to R Factor = Net cash flow / exploration & development costs). Ranges from 5 - 70%. 35% used here
- 2) 40% Government participation.
- 3) 50% flat rate income tax.

Cost Accounting: Individual license ring-fencing (not for exploration costs)
Depreciation – 2 year Straight-Line



FLOW DIAGRAM FOR INDIA
– LATE 1980s VARIOUS PSCs

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

30% Government Profit Resource



\$19.5m

\$45.5m

40% Government Participation



\$18.2m

\$27.3m

50% Income Tax



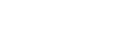
\$13.6m

\$13.7m

\$13.7m



Net income after tax



\$48.7m

Total Contractor Take

Total State Take

\$51.3m

48.7%

% Total Income

51.3%

21%

% “Take”

79%

India Chevron 1987 Production Sharing Contract

Contract Type: Production Sharing Contract

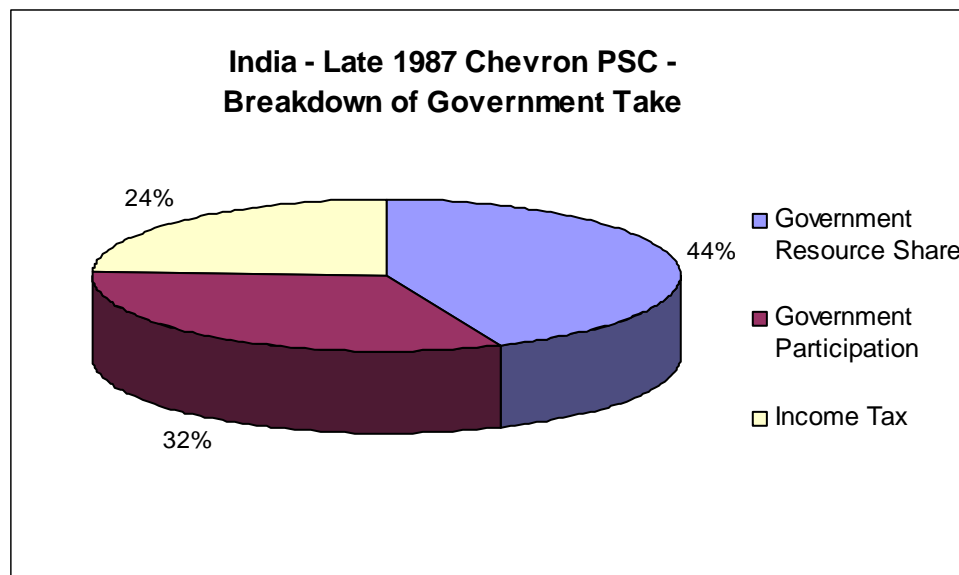
% Government Take: 80.5%

Core Taxes Used:

- 1) Profit Resource Share – 35%
- 2) Government Participation – 40%
- 3) Income Tax – 50%

- 1) Sliding scale resource share based on “Investment multiple” (similar to R Factor = Net cash flow / exploration & development costs). Ranges from 0 - 60%. 35% used here
- 2) 40% Government participation.
- 3) 50% flat rate income tax.

Cost Accounting: All costs expensed for C/R purposes
Depreciation – 5 year Straight-Line (tax purposes)



FLOW DIAGRAM FOR INDIA
– 1987 Chevron PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

35% Government Profit Resource



\$22.75m

\$42.25m

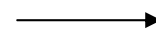
40% Government Participation



\$16.9m

\$25.35m

50% Income Tax



\$12.65m

\$12.7m

\$12.7m



Net income after tax



\$47.7m

Total Contractor Take

Total State Take

\$52.3m

47.7%

% Total Income

52.3%

19.5%

% “Take”

80.5%

India 1987 IP Bermuda Production Sharing Contract

Contract Type: Production Sharing Contract

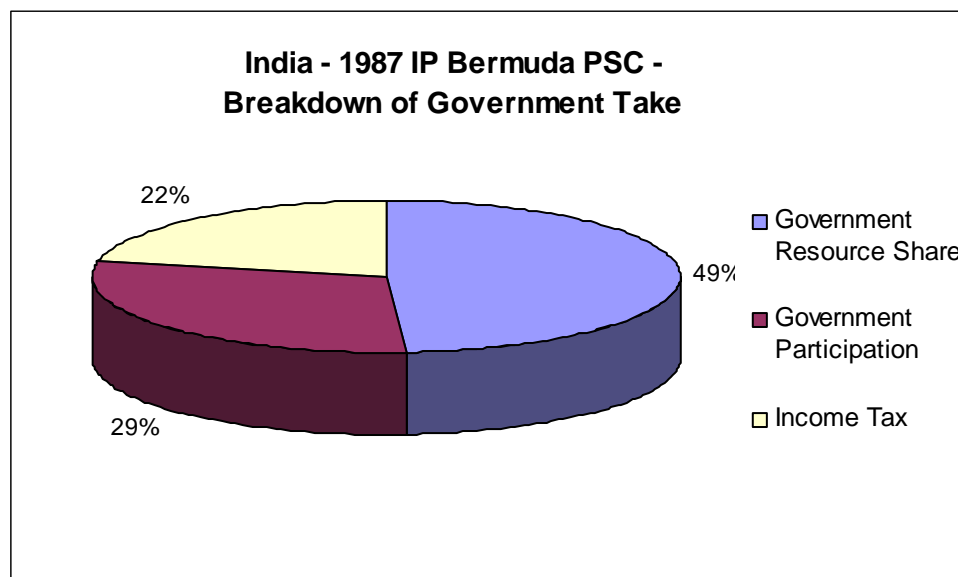
% Government Take: 82%

Core Taxes Used:

- 1) Profit Resource Share – 40%
- 2) Government Participation – 40%
- 3) Income Tax – 50%

- 1) Sliding scale resource share based on “Rate of Return”. Ranges from 0 - 65%. 40% used here
- 2) 40% Government participation.
- 3) 50% flat rate income tax.

Cost Accounting: All costs expensed for C/R purposes
Depreciation – 5 year Straight-Line (tax purposes)



FLOW DIAGRAM FOR INDIA
– 1987 IP BERMUDA PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

40% Government Profit Resource



\$26m

\$39m

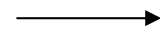
40% Government Participation



\$15.6m

\$23.4m

50% Income Tax



\$12.65m

\$11.7m

\$11.7m



Net income after tax



\$46.7m

Total Contractor Take

Total State Take

\$53.3m

46.7%

% Total Income

53.3%

18%

% “Take”

82%

India 1987 Amoco Production Sharing Contract

Contract Type: Production Sharing Contract

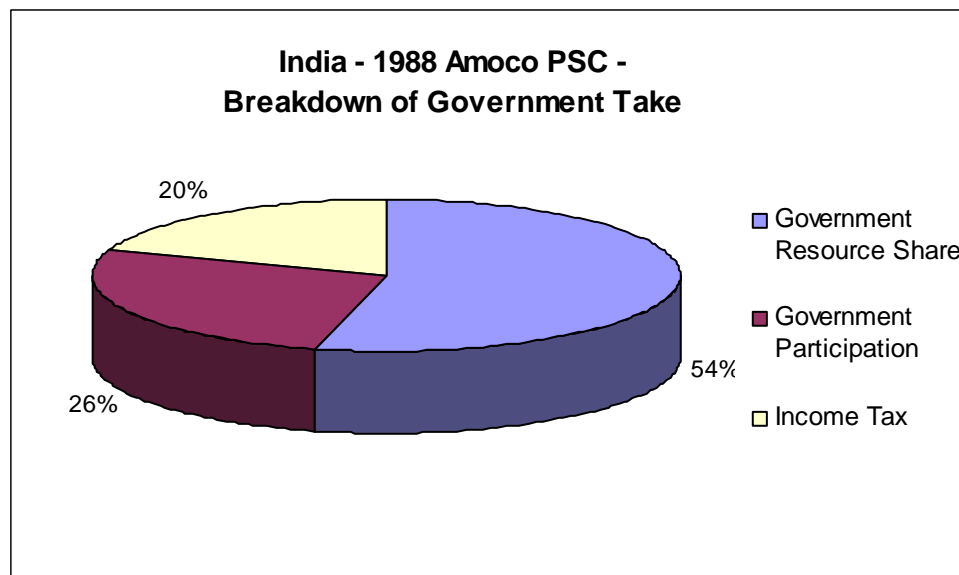
% Government Take: 83.5%

Core Taxes Used:

- 1) Profit Resource Share – 45%
- 2) Government Participation – 40%
- 3) Income Tax – 50%

- 1) Sliding scale resource share based on “Investment multiple” (similar to R Factor = Net cash flow / exploration & development costs). Ranges from 32 - 70%. 40% used here
- 2) 40% Government participation.
- 3) 50% flat rate income tax.

Cost Accounting: All costs expensed for C/R purposes
Depreciation – 5 year Straight-Line (tax purposes)



FLOW DIAGRAM FOR INDIA
– 1988 AMOCO PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

45% Government Profit Resource



\$29.25m

\$35.75m

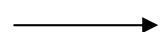
40% Government Participation



\$14.3m

\$21.45m

50% Income Tax



\$10.75m

\$10.7m

\$10.7m



Net income after tax



\$45.7m

Total Contractor Take

Total State Take

\$54.3m

45.7%

% Total Income

54.3%

16.5%

% "Take"

83.5%

India 1994 Command/Videocon Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 81%

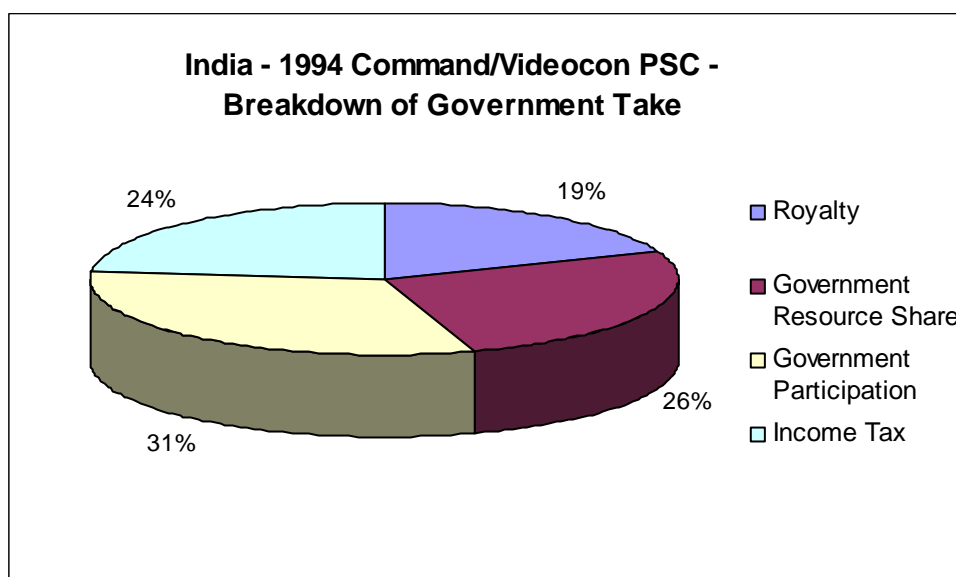
Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit Resource Share – 25%
- 3) Government Participation – 40%
- 4) Income Tax – 50%

- 1) 10% flat rate royalty for gas. (Oil based on production levels).
- 2) Sliding scale resource share based on “Rate or Return”. Ranges from 10 - 60%. 25% used here.
- 3) 40% Government participation.
- 4) 50% flat rate income tax.

Other Taxes: Signature Bonuses
Production Bonuses

Cost Accounting: All costs expensed for C/R purposes
Depreciation – 4 year Reducing-Balance (tax purposes)
Individual License Ring-fencing



FLOW DIAGRAM FOR INDIA
– 1994 COMMAND VIDEOCON AMOCO PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10% Royalty



\$10m

\$90m

\$35m



Deductions for
allowable costs (assumed)

\$55m

25% Government Profit Resource



\$13.75m

\$41.25m

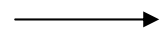
40% Government Participation



\$16.5m

\$24.75m

50% Income Tax



\$12.35m

\$12.4m

\$12.4m



Net income after tax

\$47.4m

Total Contractor Take

Total State Take

\$52.6m

47.4%

% Total Income

52.6%

16.5%

% "Take"

81

India 1994 BHP Production Sharing Contract

Contract Type: Production Sharing Contract

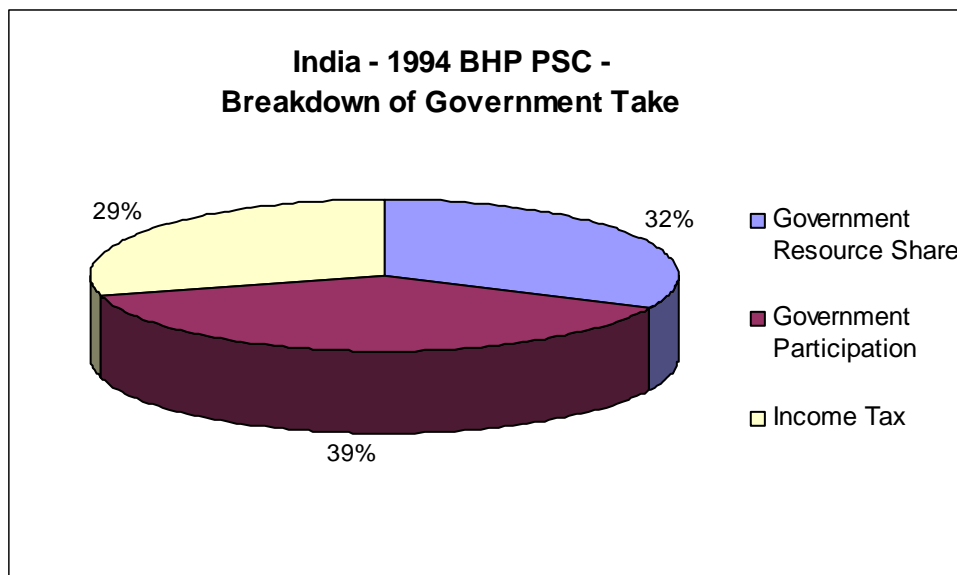
% Government Take: 77.5%

Core Taxes Used:

- 1) Profit Resource Share – 25%
- 2) Government Participation – 40%
- 3) Income Tax – 50%

- 1) Sliding scale resource share based on “Investment multiple” (similar to R Factor = Net cash flow / exploration & development costs). Ranges from 10 - 35%. 25% used here
- 2) 40% Government participation.
- 3) 50% flat rate income tax.

Cost Accounting: All costs expensed for C/R purposes
Depreciation – 5 year Straight-Line (tax purposes)



FLOW DIAGRAM FOR INDIA
– 1994 BHP PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

25% Government Profit Resource



\$16.25m

\$48.75m

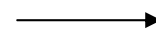
40% Government Participation



\$19.5m

\$29.25m

50% Income Tax



\$14.65m

\$14.6m

\$14.6m



Net income after tax



\$49.6m

Total Contractor Take

Total State Take

\$50.4m

49.6%

% Total Income

50.4%

22.5%

% “Take”

77.5%

India 1995 Shell Production Sharing Contract

Contract Type: Production Sharing Contract

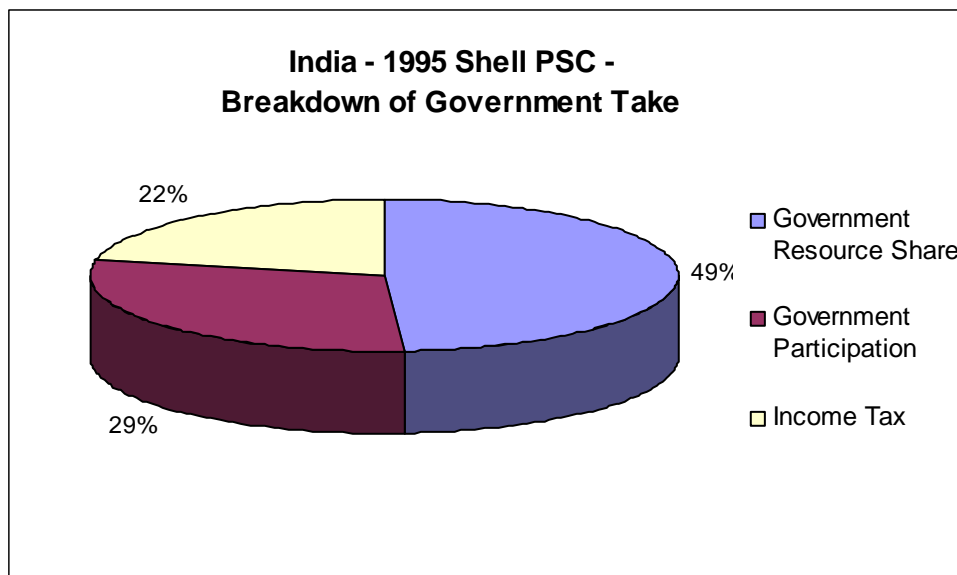
% Government Take: 82%

Core Taxes Used:

- 1) Profit Resource Share – 40%
- 2) Government Participation – 40%
- 3) Income Tax – 50%

- 1) Sliding scale resource share based on “Investment multiple” (similar to R Factor = Net cash flow / exploration & development costs). Ranges from 20 - 50%. 40% used here
- 2) 40% Government participation.
- 3) 50% flat rate income tax.

Cost Accounting: All costs expensed for C/R purposes
Depreciation – 5 year Straight-Line (tax purposes)



FLOW DIAGRAM FOR INDIA
– 1995 SHELL PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

40% Government Profit Resource



\$26m

\$39m

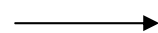
40% Government Participation



\$15.6m

\$23.4m

50% Income Tax



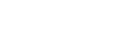
\$11.7m

\$11.7m

\$11.7m



Net income after tax



\$46.7m

Total Contractor Take

Total State Take

\$53.3m

46.7%

% Total Income

53.3%

18%

% “Take”

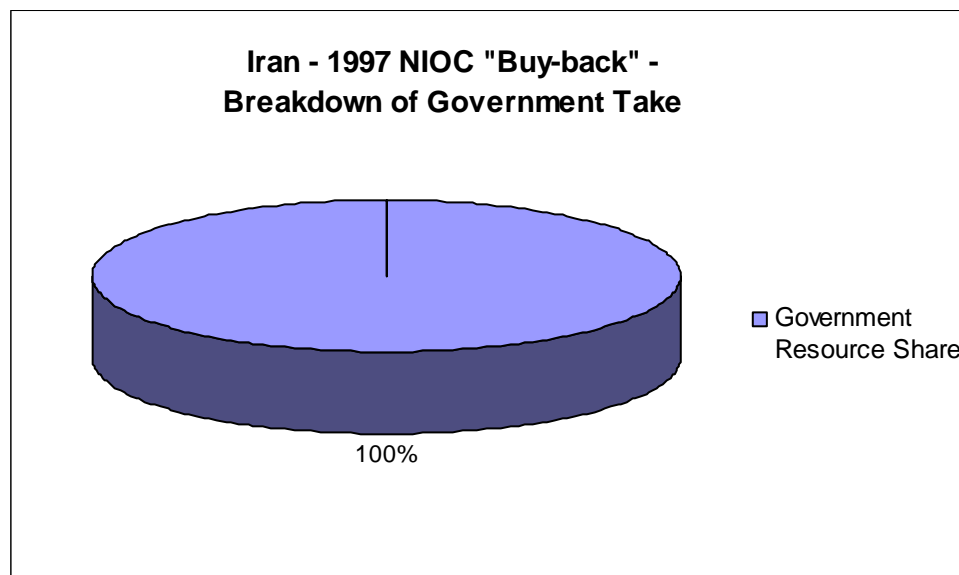
82%

Iran – 1997 NIOC “Buy-Back” Agreement

Contract Type:	Risk Service Agreement
% Government Take:	96%
Core Taxes Used:	1) Government Resource Share – 96%

- 1) Contractual \$ level of contractor “remuneration” for services performed, with full title of resource, facilities and operations passing to state. The fee is typically satisfied through resource rather than a share of profits, with the fee adjusted where a 10% change on anticipated profitability applies. Profitability level is sensitive to changes in resource prices and thus regime is progressive. (Fee typically equates to just 4% of profits where high rates of return). Government retains remaining 96% of resource.

Cost Accounting: 65% maximum cost recovery limit (reduces with production levels)
Costs incurred prior to 1st production - 3 year depreciation.
At least 30% of costs of production must be Iranian content
Relief for staff training – 2% per annum of capital costs

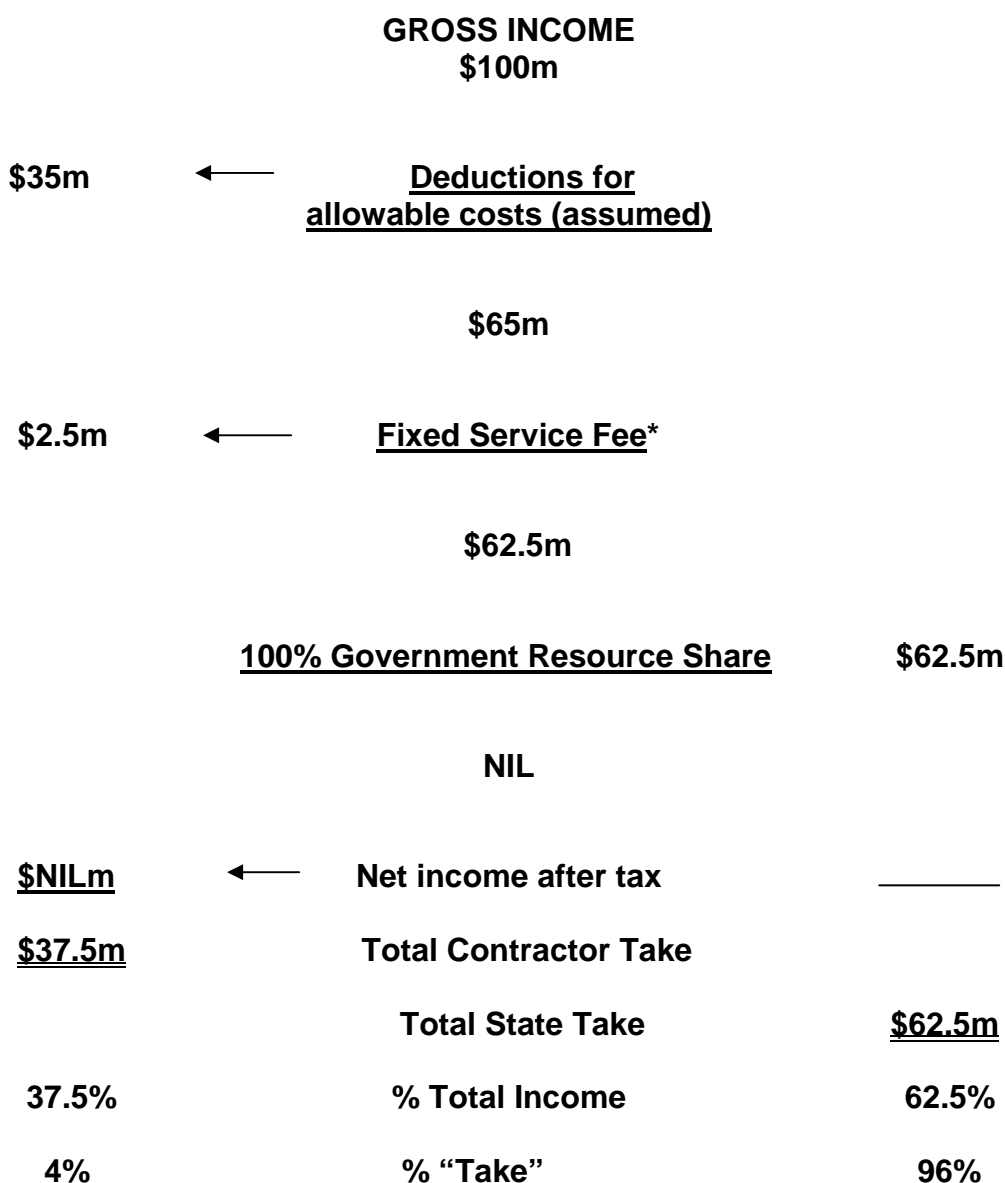


FLOW DIAGRAM FOR IRAN
– 1997 NIOC “Buy-Back”

Based on Gross Income of \$100m

Contractor Share

State Take



** = fixed \$ figure (opposed to % fee) but this is adjusted where large fluctuation (>10%) in anticipated revenues from resource.*

Iraq 1997 Lukoil Production Sharing Contract

Contract Type: Production Sharing Contract

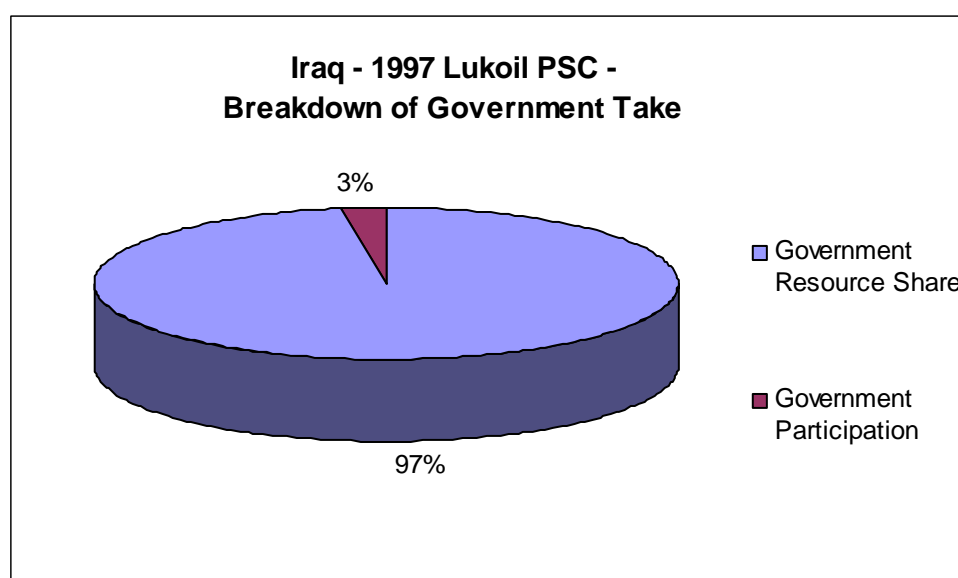
% Government Take: 92.8%

Core Taxes Used: 1) Profit Resource Share – 90.4%

- 1) Fixed rate government resource split of 90.4%, with entitlement to an additional 25% of contractor share through participation.

Other Taxes: Signature Bonuses
Training Bonuses
Price Cap formula – ministry receives additional % of contractor's profit where sold at high price levels. (Oil - 50% of price above \$20/BBL, 75% of price above \$23/BBL and 100% of price above \$26/BBL).
Minimum development obligations

Cost Accounting: 40% cost recovery limit
Depreciation – 5 year Straight-Line



FLOW DIAGRAM FOR IRAQ
– 1997 LUKOIL PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

90.4% Government Profit Resource



\$58.75m

\$6.25m

25% Government Participation



\$1.65m

\$4.6m

\$4.6m



Net income after tax



\$39.6m

Total Contractor Take

Total State Take

\$60.4m

39.6%

% Total Income

60.4%

7.2%

% "Take"

92.8%

Iraq– 2000 Development Production Contract

Contract Type: Risk Service Agreement

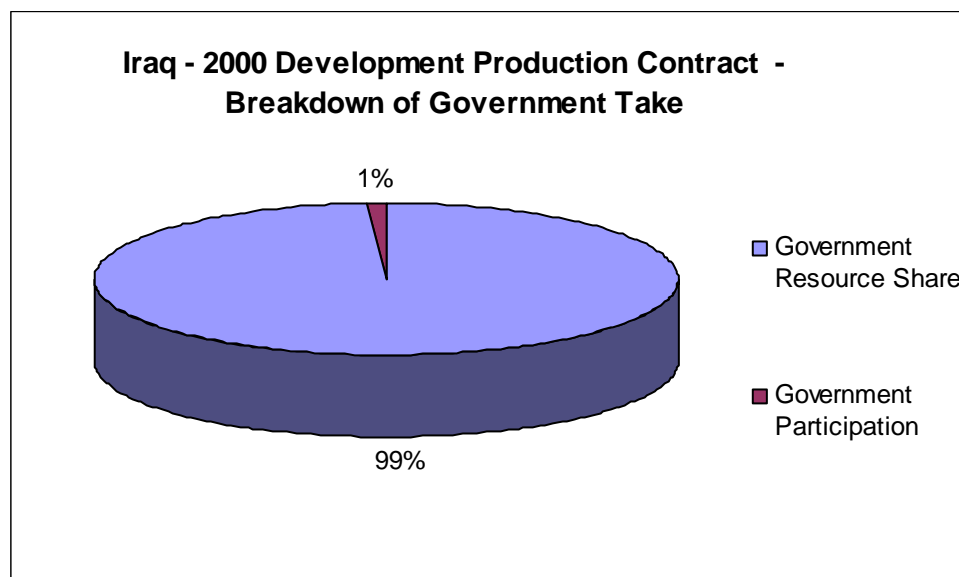
% Government Take: 91%

Core Taxes Used: 1) Government Resource Share – 90%

- 1) Fixed 10% level of contractor “remuneration” (in addition to cost recovery) for services performed, with title of remaining resource that of the state. Government entitled to a further 10% of contractor share through participation.

Other Taxes: State has option to purchase up to an additional 25% of resource at market price (Potential DMO).
Development obligations

Cost Accounting: 50% maximum cost recovery limit



FLOW DIAGRAM FOR IRAQ
– 2000 DEVELOPMENT PRODUCTION CONTRACT

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

90% Government Resource Share



\$58.5m

\$6.5m

10% Government Participation



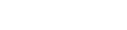
\$0.65m

\$5.85

\$5.85m



Net income after tax



\$40.85m

Total Contractor Take

Total State Take

\$59.15m

40.85%

% Total Income

59.15%

9%

% “Take”

91%

Ireland – 1994 License Round Concession

Contract Type: Royalty / Tax

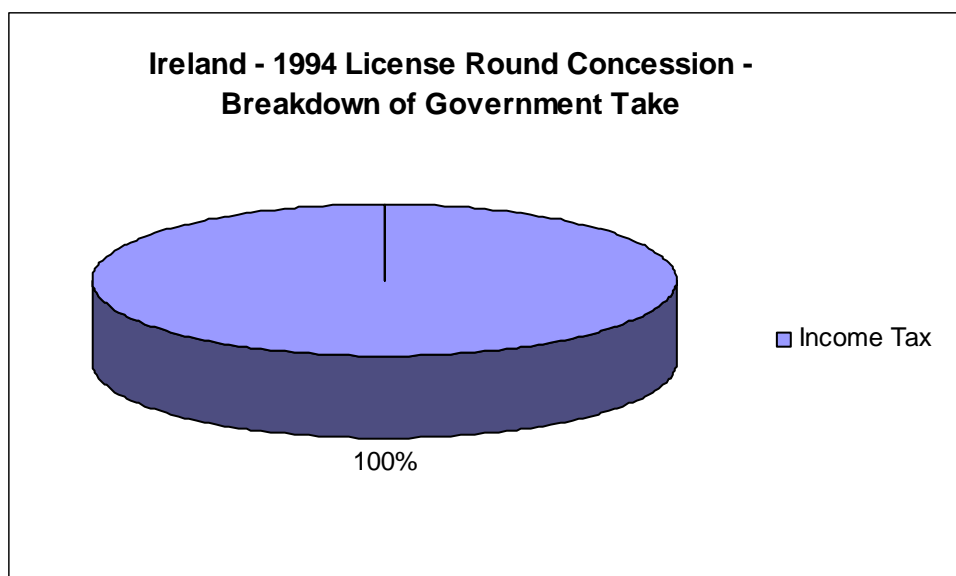
% Government Take: 25%

Core Taxes Used: 1) Income Tax - 25%

1) Fixed rate income tax of 25%

Other Taxes: Rentals
Exploration obligations

Cost Accounting: No Depreciation – all costs expensed
No individual license ring-fencing



FLOW DIAGRAM FOR IRELAND
– 1994 LICENSE ROUND CONCESSION

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

25% Income Tax



\$16.25m

\$48.75m

\$48.75m



Net income after tax



\$83.75m

Total Contractor Take

Total State Take

\$16.25m

83.75%

% Total Income

16.25%

75%

% “Take”

25%

Kazakhstan – 1993 Anglo-Dutch Tenge

Contract Type: Production Sharing Contract

% Government Take: 68.2%

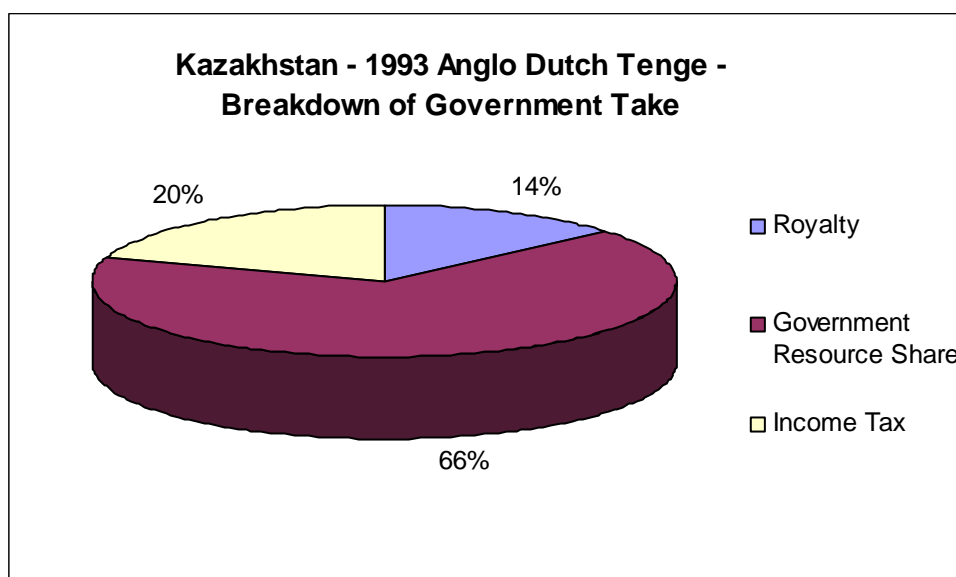
Core Taxes Used:

- 1) Royalty – 6%
- 2) Government Resource Share – 50%
- 3) Income Tax – 30%

- 1) Fixed rate royalty of 6% - confusingly termed a “Sliding scale tax”
- 2) 50/50% profit split, based on participation.
- 3) Fixed rate income tax of 30% on contractor’s share of profit resource

Other Taxes: State has option to purchase up to an additional 25% of resource at market price (Potential DMO).
Development obligations
15% Withholding Tax (“Repatriation Tax”)

Cost Accounting: Maximum cost recovery limits are 100% gross revenues
Individual license ring-fencing

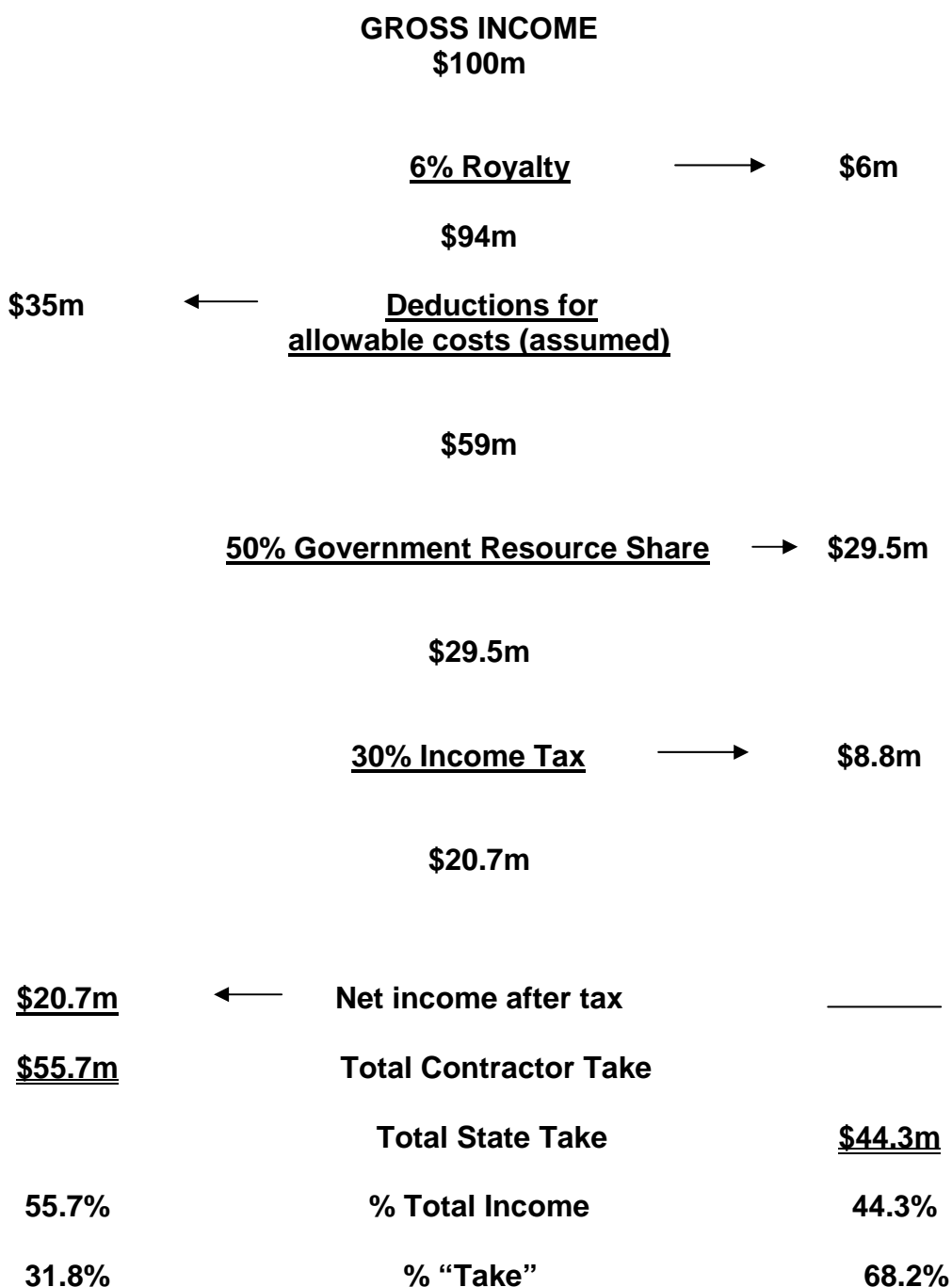


FLOW DIAGRAM FOR KAZAKHSTAN
– 1993 ANGLO-DUTCH TENGE

Based on Gross Income of \$100m

Contractor Share

State Take



Kazakhstan – 1994 ORYX Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 72.5%

Core Taxes Used:

- 1) Royalty – 5%
- 2) Government Resource Share – 50%
- 3) Income Tax – 30%

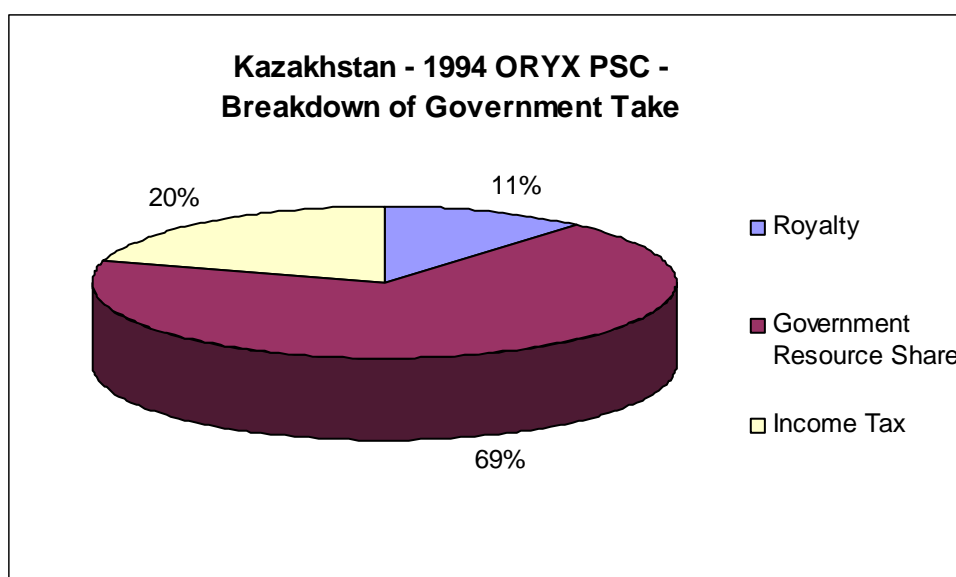
1) Fixed rate royalty of 5%.

2) Sliding scale profit resource split. Government share ranges from 20% to 80%. 59% used here.

3) Fixed rate income tax of 30% on contractor's share of profit resource

Other Taxes: Rentals
15% Withholding Tax ("Repatriation Tax")

Cost Accounting: 75% cost recovery limits
Individual license ring-fencing
Interest cost recovery (@Libor + 4%)
Capital costs expensed for C/R, 3 year straight line for tax.

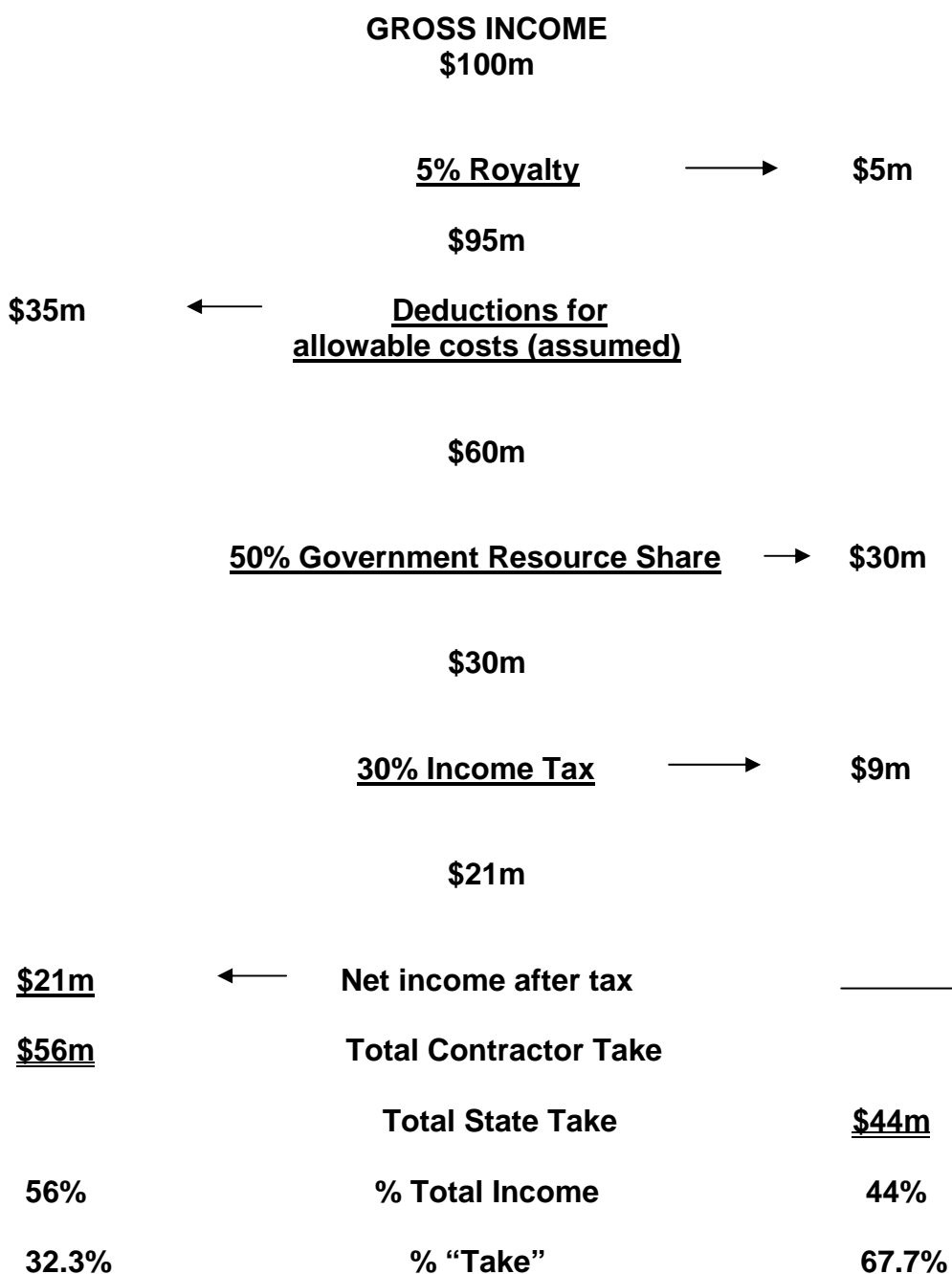


FLOW DIAGRAM FOR KAZAKHSTAN
– 1994 ORYX PSC

Based on Gross Income of \$100m

Contractor Share

State Take



Kazakhstan – 1995 Model Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 83.6%

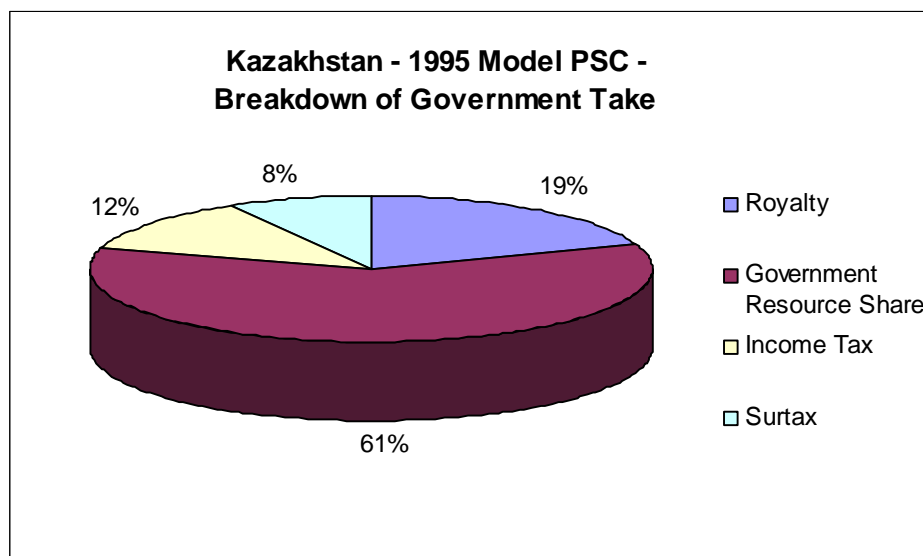
Core Taxes Used:

- 1) Royalty – 10.5%
- 2) Government Resource Share – 60%
- 3) Income Tax – 30%
- 4) Surtax – 30%

- 1) Sliding-scale royalty ranging from 3% to 17% - 10% used here. Additional 0.5% "Road Fund" based on gross revenues is another effective royalty.
- 2) Sliding scale profit resource split. Government share ranges from 40% to 80%. 60% used here.
- 3) Fixed rate income tax of 30% on contractor's share of profit resource
- 4) Three-tier surtax system with rates at 0%, 30% and 50% based on post I income tax profitability. 30% here.

Other Taxes: Signature Bonuses
Rentals
15% Withholding Tax ("Repatriation Tax")
0.5% Property Tax

Cost Accounting: 60% cost recovery limit
Individual license ring-fencing
Interest cost deductible in tax calculations
Capital costs expensed for C/R, 3 year straight line for tax.



FLOW DIAGRAM FOR KAZAKHSTAN
– 1995 MODEL PSC

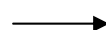
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10.5% Royalty



\$10.5m

\$89.5m

\$35m



Deductions for
allowable costs (assumed)

\$54.5m

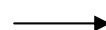
60% Government Resource Share



\$32.7m

\$21.8m

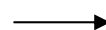
30% Income Tax



\$6.5m

\$15.3m

30% Surtax



\$5m

\$10.3m

\$10.3m



Net income after tax

\$45.3m

Total Contractor Take

Total State Take

\$54.7m

45.3%

% Total Income

54.7%

16.4%

% “Take”

83.6%

Kazakhstan – 1992 Chevron Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 81.7%

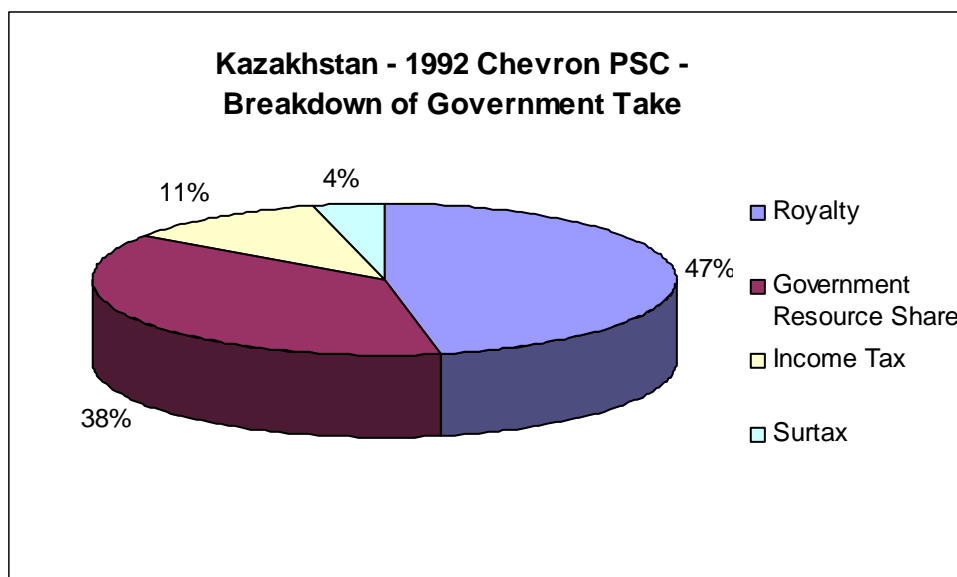
Core Taxes Used:

- 1) Royalty – 25%
- 2) Government Resource Share – 50%
- 3) Income Tax – 30%
- 4) Surtax –15%

- 1) Two-tier royalty rate. 25% (used here) above 17% rate of return. Reduced fixed \$ royalties in years 1, 2 and 3.
- 2) Fixed 50% government profit share, based on participation.
- 3) Fixed rate income tax of 30% on contractor's share of profit resource
- 4) Three-tier surtax system with rates at 5%, 15% and 25% based on post income tax profitability. 30% here.

Other Taxes: Signature & other bonuses
15% Withholding Tax ("Repatriation Tax")
Social Welfare Development Fund annual contribution

Cost Accounting: Individual license ring-fencing
Interest cost deductible in tax calculations
Capital costs expensed for C/R, 5 year straight line for tax.



FLOW DIAGRAM FOR KAZAKHSTAN
– 1992 CHEVRON PSC

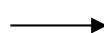
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

25% Royalty



\$25m

\$89.5m

\$35m



Deductions for
allowable costs (assumed)

\$40m

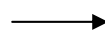
50% Government Resource Share



\$20m

\$20m

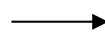
30% Income Tax



\$6m

\$14m

15% Surtax



\$2.1m

\$11.9m

\$11.9m



Net income after tax

\$46.9m

Total Contractor Take

Total State Take

\$53.1m

46.9%

% Total Income

53.1%

18.3%

% "Take"

81.7%

Libya – 1955 Veba Royalty / Tax Contract

Contract Type: Royalty / Tax

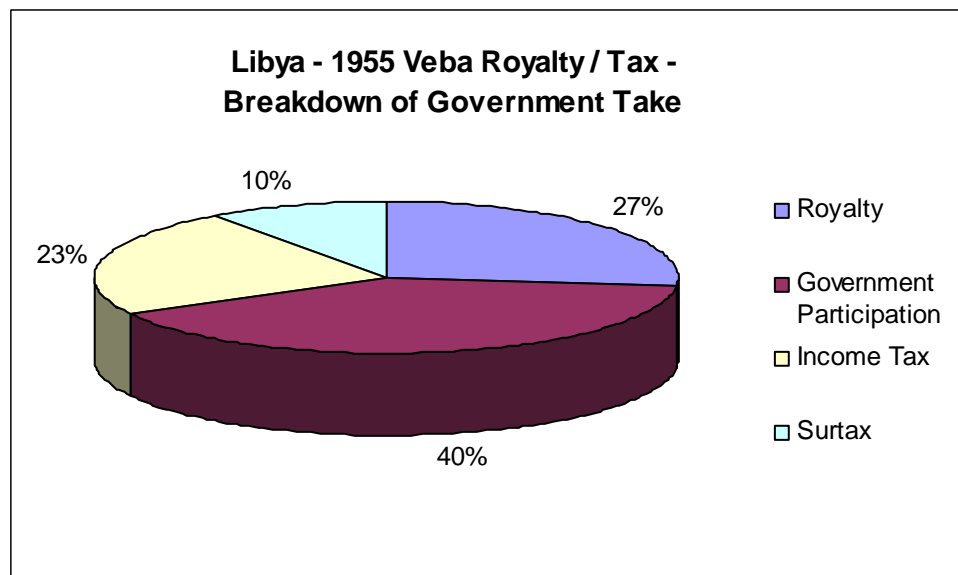
% Government Take: 94.9%

Core Taxes Used:

- 1) Royalty – 16.667%%
- 2) Government Participation – 51%
- 3) Income Tax – 60%
- 4) Surtax – 65%

- 1) Fixed rate royalty of 16.667%
- 2) Fixed 51% government profit share, based on participation.
- 3) Fixed rate income tax of 60% on contractor's share of profit resource
- 4) Fixed rate surtax of 65% on profits remaining after income tax.

Cost Accounting: Individual license ring-fencing



FLOW DIAGRAM FOR LIBYA
– 1955 VEBA ROYALTY / TAX CONTRACT

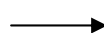
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

16.667% Royalty



\$16.7m

\$83.3m

\$35m



Deductions for
allowable costs (assumed)

\$48.3m

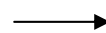
51% Government Resource Share



\$24.6m

\$23.7m

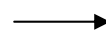
60% Income Tax



\$14.2m

\$9.5m

65% Surtax



\$6.2m

\$3.3m

\$3.3m



Net income after tax

\$38.3m

Total Contractor Take

Total State Take

\$61.7m

38.3%

% Total Income

61.7%

5.1%

% "Take"

94.9%

Libya – 1966 AGIP Production Sharing Contract

Contract Type: Production Sharing Contract

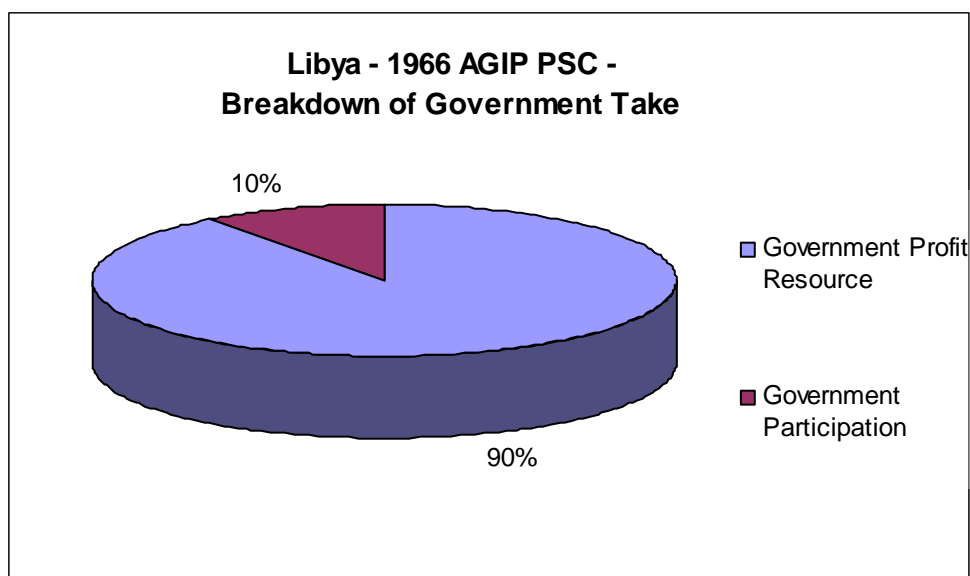
% Government Take: 94.8%

Core Taxes Used:

- 1) Government Resource Share – 85%
- 2) Government Participation – 65%

- 1) Fixed resource share with government receiving 85%
- 2) Entitlement to a further 65% of contractor's profit resource through participation.

Cost Accounting: Individual license ring-fencing
35% cost recovery limits



FLOW DIAGRAM FOR LIBYA
– 1966 AGIP PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

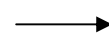
85% Government Resource Share



\$55.25m

\$9.75m

65% Government Participation



\$6.35m

\$3.4m

\$3.4m



Net income after tax



\$38.4m

Total Contractor Take

Total State Take

\$61.6m

38.4%

% Total Income

61.6%

5.2%

% “Take”

94.8%

Libya – 1966 Wintershall Royalty / Tax Contract

Contract Type: Royalty / Tax

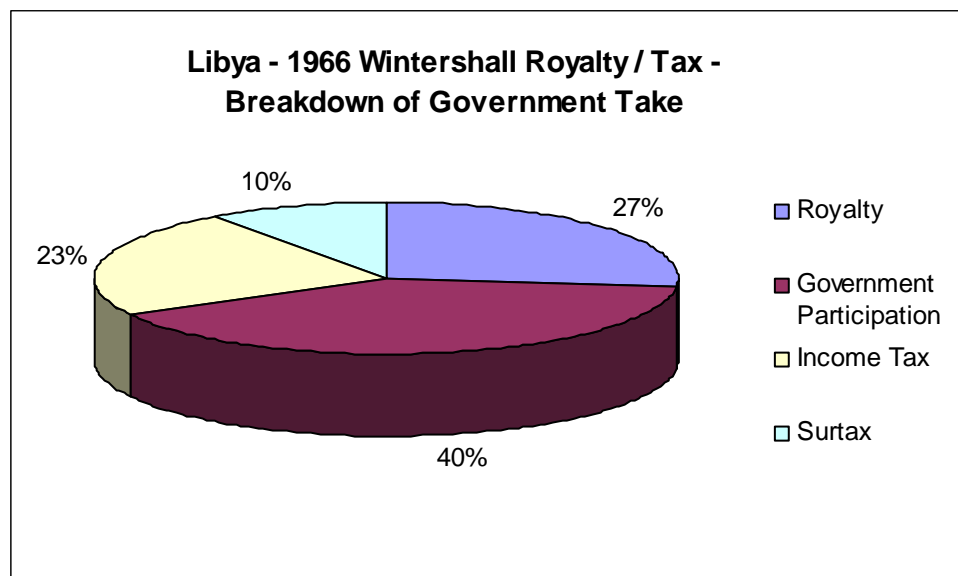
% Government Take: 94.9%

Core Taxes Used:

- 1) Royalty – 16.667%%
- 2) Government Participation – 51%
- 3) Income Tax – 60%
- 4) Surtax – 65%

- 1) Fixed rate royalty of 16.667%
- 2) Fixed 51% government profit share, based on participation.
- 3) Fixed rate income tax of 60% on contractor's share of profit resource
- 4) Fixed rate surtax of 65% on profits remaining after income tax.

Cost Accounting: Individual license ring-fencing



FLOW DIAGRAM FOR LIBYA
– 1966 WINTERSHALL ROYALTY / TAX CONTRACT

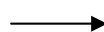
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

16.667% Royalty



\$16.7m

\$83.3m

\$35m



Deductions for
allowable costs (assumed)

\$48.3m

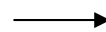
51% Government Resource Share



\$24.6m

\$23.7m

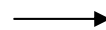
60% Income Tax



\$14.2m

\$9.5m

65% Surtax



\$6.2m

\$3.3m

\$3.3m



Net income after tax

\$38.3m

Total Contractor Take

Total State Take

\$61.7m

38.3%

% Total Income

61.7%

5.1%

% “Take”

94.9

Libya – 1990 Model Contract

Contract Type: Production Sharing Contract

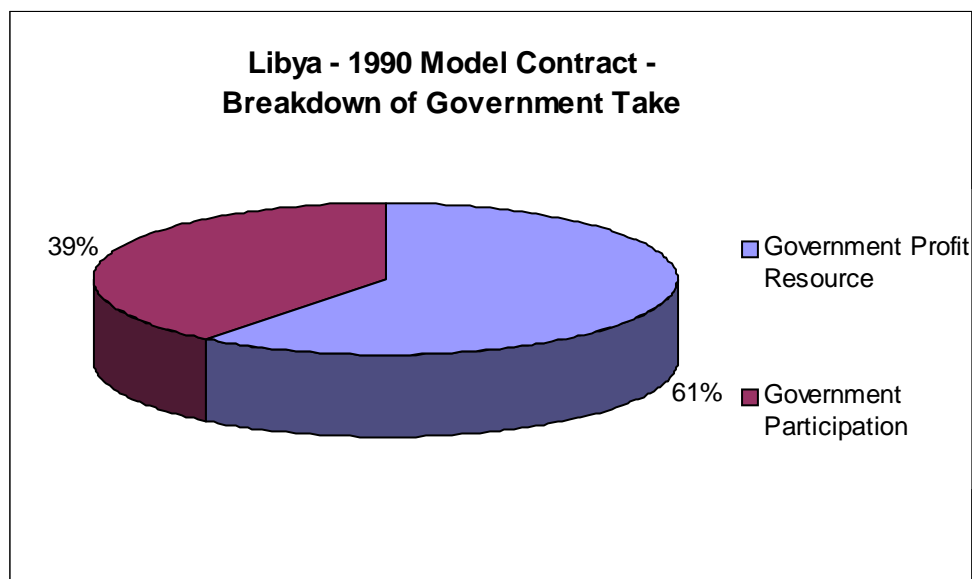
% Government Take: 82.5%

Core Taxes Used:

- 1) Government Resource Share – 50%
- 2) Government Participation – 65%

- 1) Sliding-scale resource share rates based on levels of production and profitability. Scope to vary from 5% to 95% government, but typical ranges from 20% to 90%. Figure used here is 50%
- 2) Entitlement to a further 65% of contractor's profit resource through participation.

Cost Accounting: Individual license ring-fencing
35% cost recovery limits



FLOW DIAGRAM FOR LIBYA
– 1990 MODEL CONTRACT

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m



Deductions for
allowable costs (assumed)

\$65m

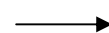
50% Government Resource Share



\$32.5m

\$32.5m

65% Government Participation



\$21.1m

\$11.4m

\$11.4m



Net income after tax



\$46.4m

Total Contractor Take

Total State Take

\$53.6m

46.4%

% Total Income

53.6%

17.5%

% “Take”

82.5%

Libya – 1999 Model Production Sharing Contract

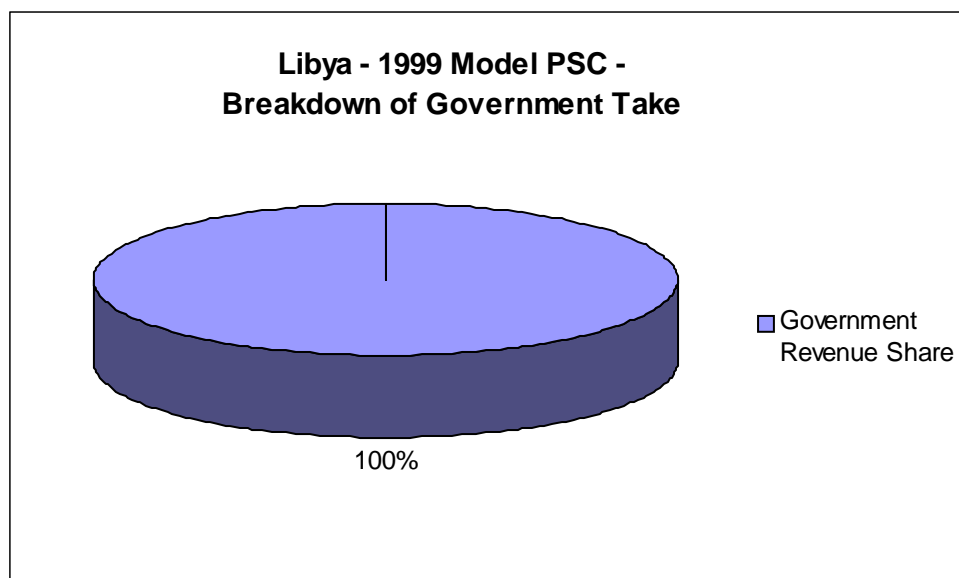
Contract Type: Production Sharing Contract

% Government Take: 95.3%

Core Taxes Used: 1) Government Resource Share – 85%

- 1) In a similar way to the Peruvian type PSC, gross production is split prior to any cost recovery by the contractor. Recoverable costs then assumed to be 35% of contractor share of gross revenues. The contractor then has the right to purchase 50% of the government's share at a pre-determined price.

Other Taxes: Optional government participation can be up to 30%.



FLOW DIAGRAM FOR LIBYA
– 1999 MODEL PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

85% Government Resource Share → **\$85m**

\$15m

\$5.3m ← **Deductions for**
allowable costs (35% assumed) *

\$9.7m

\$9.7m ← **Net income after tax** _____

\$15m **Total Contractor Take**

Total State Take **\$85m**

15% **% Total Income** **85%**

4.7% **% “Take”** **95.3%**

** = Costs deducted after profit resource split, which means that only largest fields will be economically viable for contractor (where costs less than 15% of gross total revenues. Assumed to be 35% of gross contractor revenues here, as in other models).*

The above may be partly overcome by the contractual right of the contractor to purchase 50% of state resource share at a pre-determined price.

Malaysia – Late 1980s / Early 1990s Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 81.6%

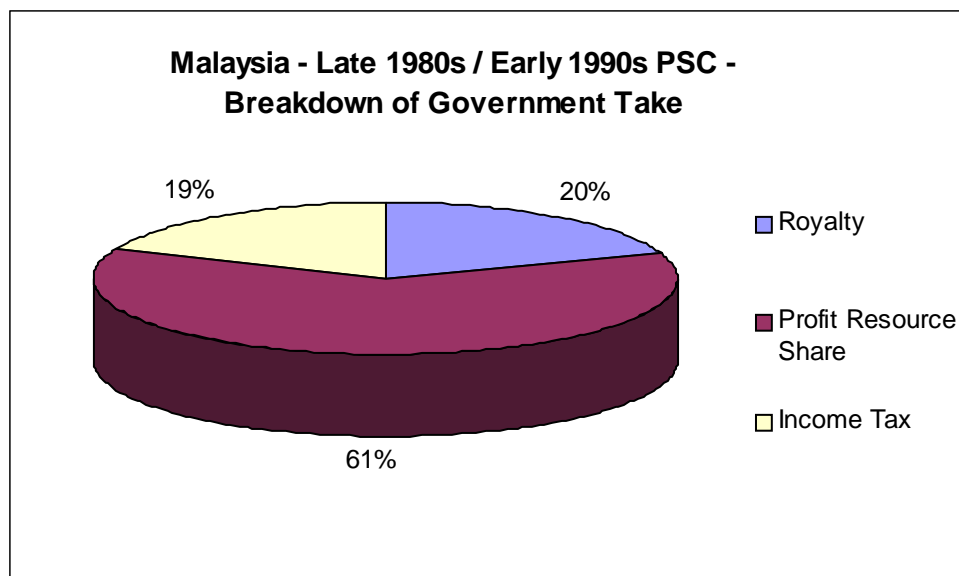
Core Taxes Used:

- 1) Royalty – 10.5%
- 2) Government Resource Share – 60%
- 3) Income Tax – 45%

- 1) Flat rate royalty of 10%, together with additional 0.5% research royalty.
- 2) Two-tier profit gas split. First two trillion cubic feet (2TCF) is at 50% and production in excess of that at 70% government share. Oil uses similar levels based on production. 60% used here.
- 3) Fixed rate “Petroleum Income Tax” of 45%

Other Taxes: 25% Export Duty on profit resource exported
Possible government participation up to 15%
“Reverse DMOs” (i.e. contractor has right to purchaseshare of government resource – up to 50%)

Cost Accounting: Individual license ring-fencing
60% cost recovery limits (50% for oil)
10% Straight Line Depreciation



FLOW DIAGRAM FOR MALAYSIA
– EARLY 1980s / LATE 1990s PSC

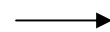
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10.5% Royalty



\$10.5m

\$89.5m

\$35m



Deductions for
allowable costs (assumed)

\$54.5m

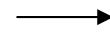
60% Government Resource Share



\$32.7m

\$21.8m

45% Income Tax



\$9.8m

\$12m

\$12m



Net income after tax



\$47m

Total Contractor Take

Total State Take

\$53m

47%

% Total Income

53%

28.4%

% “Take”

81.6%

Malaysia – 1994 Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 79.9%

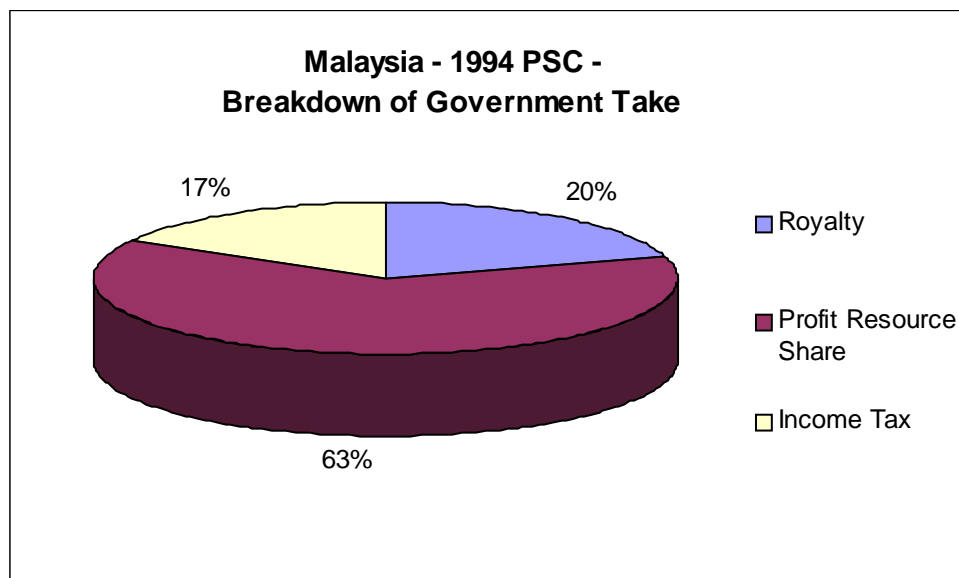
Core Taxes Used:

- 1) Royalty – 10.5%
- 2) Government Resource Share – 60%
- 3) Income Tax – 40%

- 1) Flat rate royalty of 10%, together with additional 0.5% research royalty.
- 2) Two-tier profit gas split. First two trillion cubic feet (2TCF) is at 50% and production in excess of that at 70% government share. Oil uses similar levels based on production. 60% used here.
- 3) Fixed rate “Petroleum Income Tax” of 40%

Other Taxes: 20% Export Duty on profit resource exported
Possible government participation up to 15%.

Cost Accounting: Individual license ring-fencing
60% cost recovery limits (50% for oil)
10% Straight Line Depreciation



FLOW DIAGRAM FOR MALAYSIA
– 1994 PSC

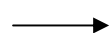
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10.5% Royalty



\$10.5m

\$89.5m

\$35m



Deductions for
allowable costs (assumed)

\$54.5m

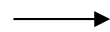
60% Government Resource Share



\$32.7m

\$21.8m

40% Income Tax



\$8.7m

\$13.1m

\$13.1m



Net income after tax



\$48.1m

Total Contractor Take

Total State Take

\$51.9m

48.1%

% Total Income

51.9%

21.1%

% "Take"

79.9%

Malaysia – Deepwater Terms Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 81.4%

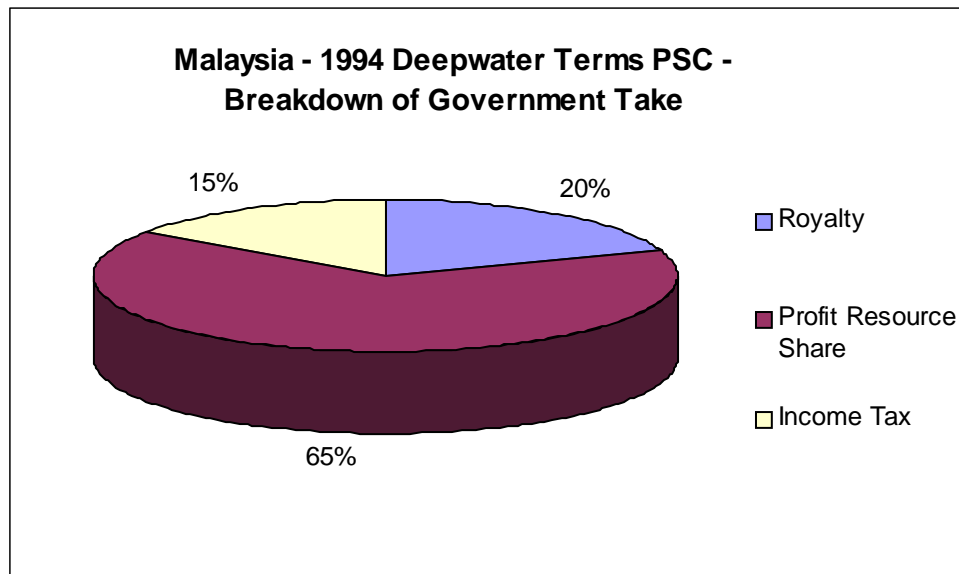
Core Taxes Used:

- 1) Royalty – 10.5%
- 2) Government Resource Share – 63%
- 3) Income Tax – 40%

- 1) Flat rate royalty of 10%, together with additional 0.5% research royalty.
- 2) Sliding-scale rates based on production levels. Atypically, the government share of resource decreases with production levels, but the rates are stepped. System designed for oil with first 50,000 BOPD giving 86% government share and all production over 300,000 BOPD giving 50% share. Overall rate of 63% used here.
- 3) Fixed rate “Petroleum Income Tax” of 40%

Other Taxes: 20% Export Duty on profit resource exported
Possible government participation up to 15%.

Cost Accounting: Individual license ring-fencing
75% cost recovery limits
5% Straight Line Depreciation



FLOW DIAGRAM FOR MALAYSIA
– 1994 DEEPWATER TERMS PSC

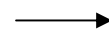
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10.5% Royalty



\$10.5m

\$89.5m

\$35m



Deductions for
allowable costs (assumed)

\$54.5m

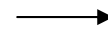
63% Government Resource Share



\$34.3m

\$20.2m

40% Income Tax



\$8.1m

\$12.1m

\$12.1m



Net income after tax



\$47.1m

Total Contractor Take

Total State Take

\$52.9m

47.1%

% Total Income

52.9%

19.6%

% "Take"

81.4%

Malaysia – R/C Model Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 83.9%

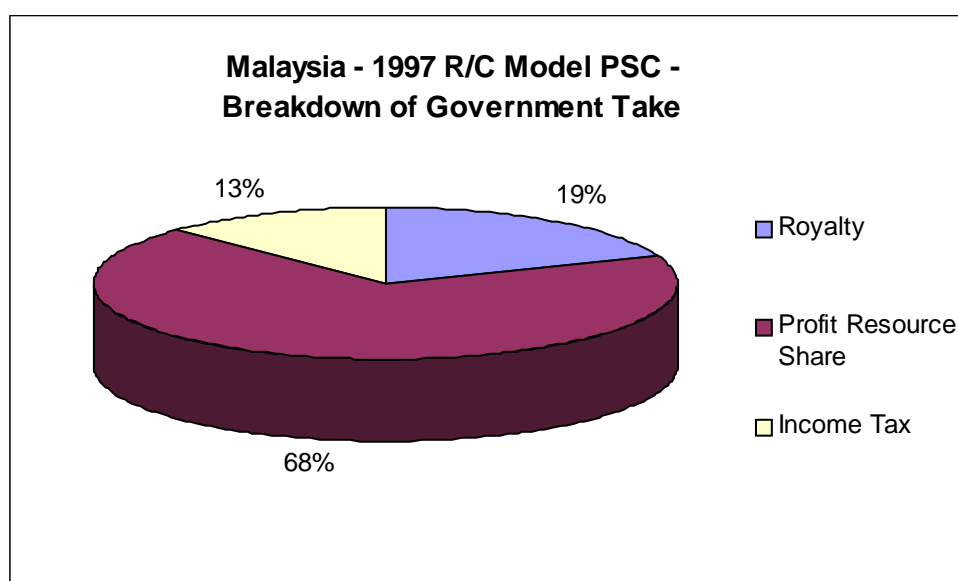
Core Taxes Used:

- 1) Royalty – 10.5%
- 2) Government Resource Share – 68%
- 3) Income Tax – 40%

- 1) Flat rate royalty of 10%, together with additional 0.5% research royalty.
- 2) Sliding-scale rates based on “R factor” to encompass, production levels and profitability. Below production threshold (for gas - 0.75 Trillion Cubic Feet(TCF)) government resource share ranges from 20% to 70% (60% used here) and above TCF threshold rates range from 60% to 90% (70% here). Overall rate is 68% based on 3.75 TCF production levels.
- 3) Fixed rate “Petroleum Income Tax” of 40%

Other Taxes: 20% Export Duty on profit resource exported
Possible government participation up to 15%.

Cost Accounting: Individual license ring-fencing
Cost recovery limits part of resource sharing calculation – ranging from 30% to 70% and negatively correlated to production levels. 30% for larger fields.



FLOW DIAGRAM FOR MALAYSIA
– R/C MODEL PSC

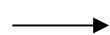
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10.5% Royalty



\$10.5m

\$89.5m

\$35m



Deductions for
allowable costs (assumed)

\$54.5m

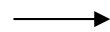
68% Government Resource Share



\$37.1m

\$17.4m

40% Income Tax



\$7m

\$10.4m

\$10.4m



Net income after tax

\$45.4m

Total Contractor Take

Total State Take

\$54.6m

45.4%

% Total Income

54.6%

16.1%

% "Take"

83.9%

Mozambique – 1984 Amoco Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 69.2%

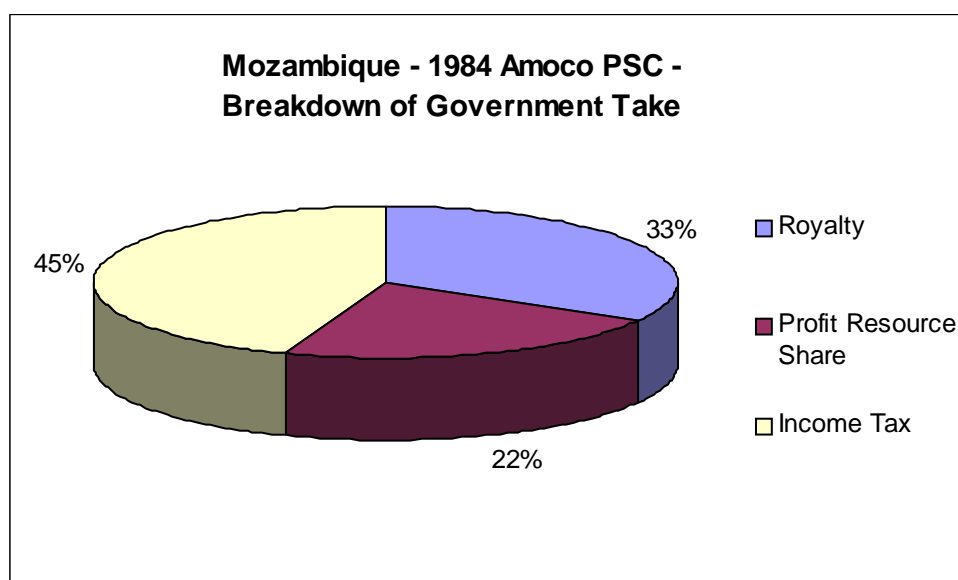
Core Taxes Used:

- 1) Royalty – 15%
- 2) Government Resource Share – 20%
- 3) Income Tax – 50%

- 1) Flat rate royalty of 15%.
- 2) Three-tier profit resource share based on production levels (designed for oil). Levels are at 10%, 20% and 50%. 20% taken here.
- 3) Fixed rate “Petroleum Income Tax” of 50%

Other Taxes: Signature Bonuses
Pro-rata Domestic Market Obligations (DMO) at market price

Cost Accounting: Individual license ring-fencing
50% cost recovery limits
Depreciation – 20% straight line



FLOW DIAGRAM FOR MOZAMBIQUE
– 1984 AMOCO PSC

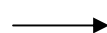
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

15% Royalty



\$15m

\$85m

\$35m



Deductions for
allowable costs (assumed)

\$50m

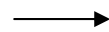
20% Government Resource Share



\$10m

\$40m

50% Income Tax



\$20m

\$20m

\$20m



Net income after tax

\$55m

Total Contractor Take

Total State Take

\$45m

55%

% Total Income

45%

30.8%

% "Take"

69.2%

Myanmar – 1989/1990 First Round Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 92.5%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit Resource Share – 85%
- 3) Government Participation – 15%
- 4) Income Taxes – 30.5%

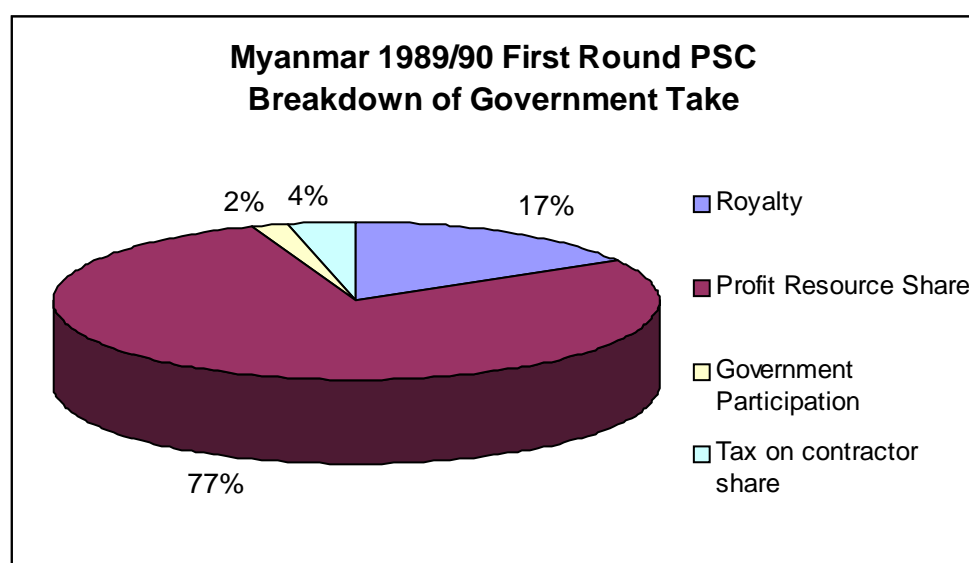
- 1) Royalty of 10% taken from gross revenues.
- 2) After contractors cost recovery and deduction of royalties, resources are split according to a sliding scale based on production, with the government share ranging from 65-90%.
- 3) The government is entitled to a further 15% of the profit resource through participation
- 1) Corporate income tax is calculated at a rate of 30%, in addition a 0.5% research and training tax is levied at the same time. There is a tax holiday on income tax for the first 3 years according to Foreign Investment Law.

Other Taxes: Signature bonus
Production Bonuses

Domestic Market Obligations on a pro-rata basis

Cost Accounting: Development costs are depreciated on a straight line basis over a period of 4 years. Exploration costs are expensed.

Cost recovery is limited to 40%

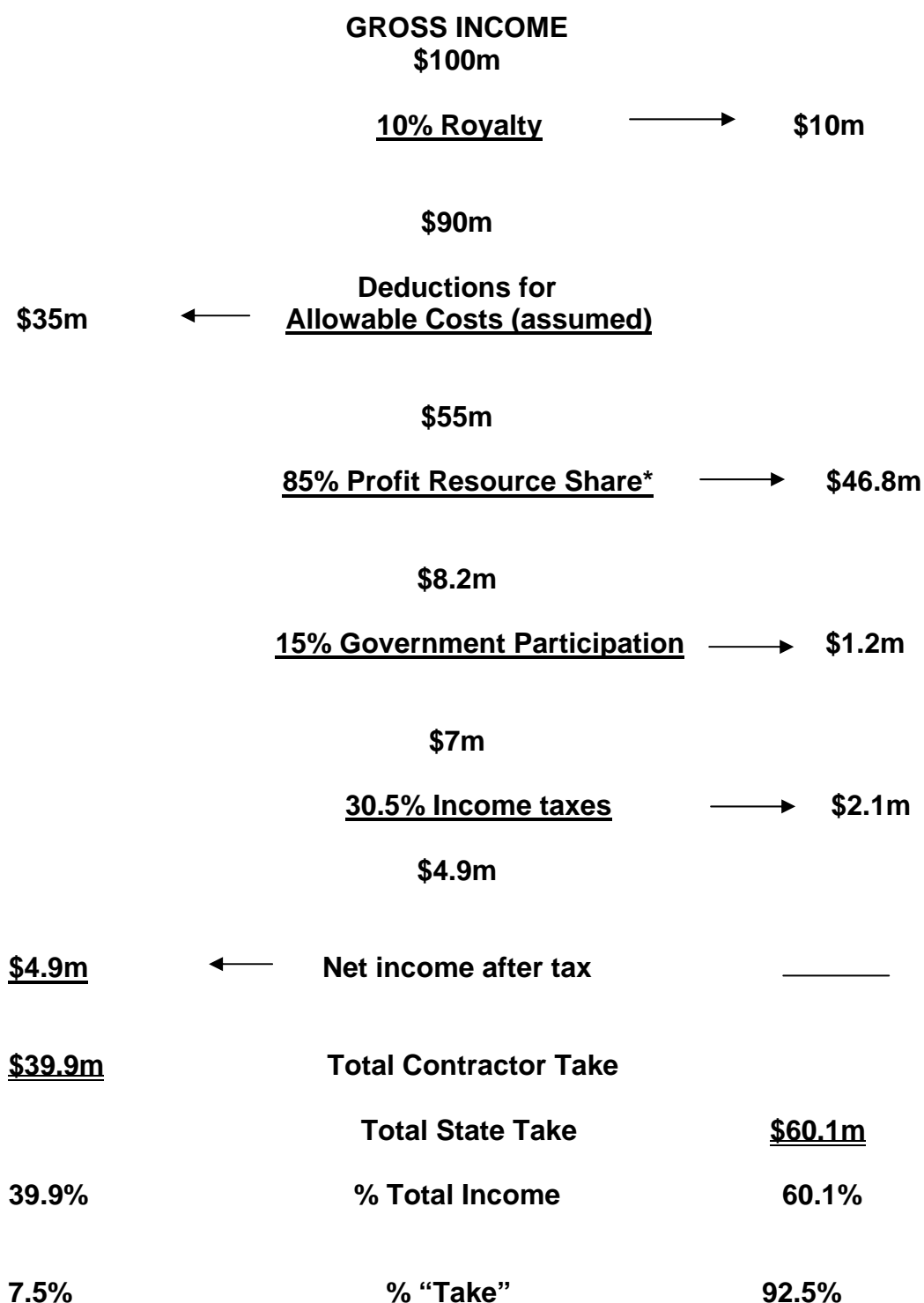


FLOW DIAGRAM FOR MYANMAR
1989/90 - FIRST ROUND PSC

Based on Gross Income of \$100m

Contractor Share

State Take



*= Profit Resource Share varies between 65-90% depending on production

Myanmar –1992 Onshore New E&P Blocks

Contract Type: Production Sharing Contract

% Government Take: 92.5%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit Resource Share – 85%
- 3) Government Participation – 15%
- 4) Income Taxes – 30.5%

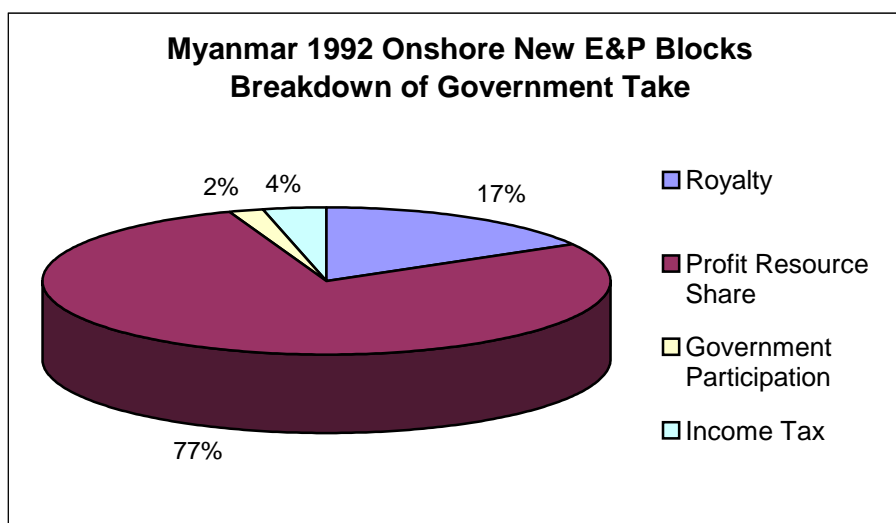
- 1) Royalty of 10% taken from gross revenues.
- 2) After contractors cost recovery and deduction of royalties, resources are split according to a sliding scale based on production, with the government share ranging from 65-90%.
- 3) The government is entitled to a further 15% of the profit resource through participation
- 4) Corporate income tax is calculated at a rate of 30%, in addition a 0.5% research and development tax is levied at the same time. There is a tax holiday on income tax for the first 3 years according to Foreign Investment Law.

Other Taxes: Signature bonus
Discovery bonus
Production bonuses

Training Fee

Domestic Market Obligation; 20% of the profit oil at 60% of world prices.

Cost Accounting: Cost recovery is limited to 40%

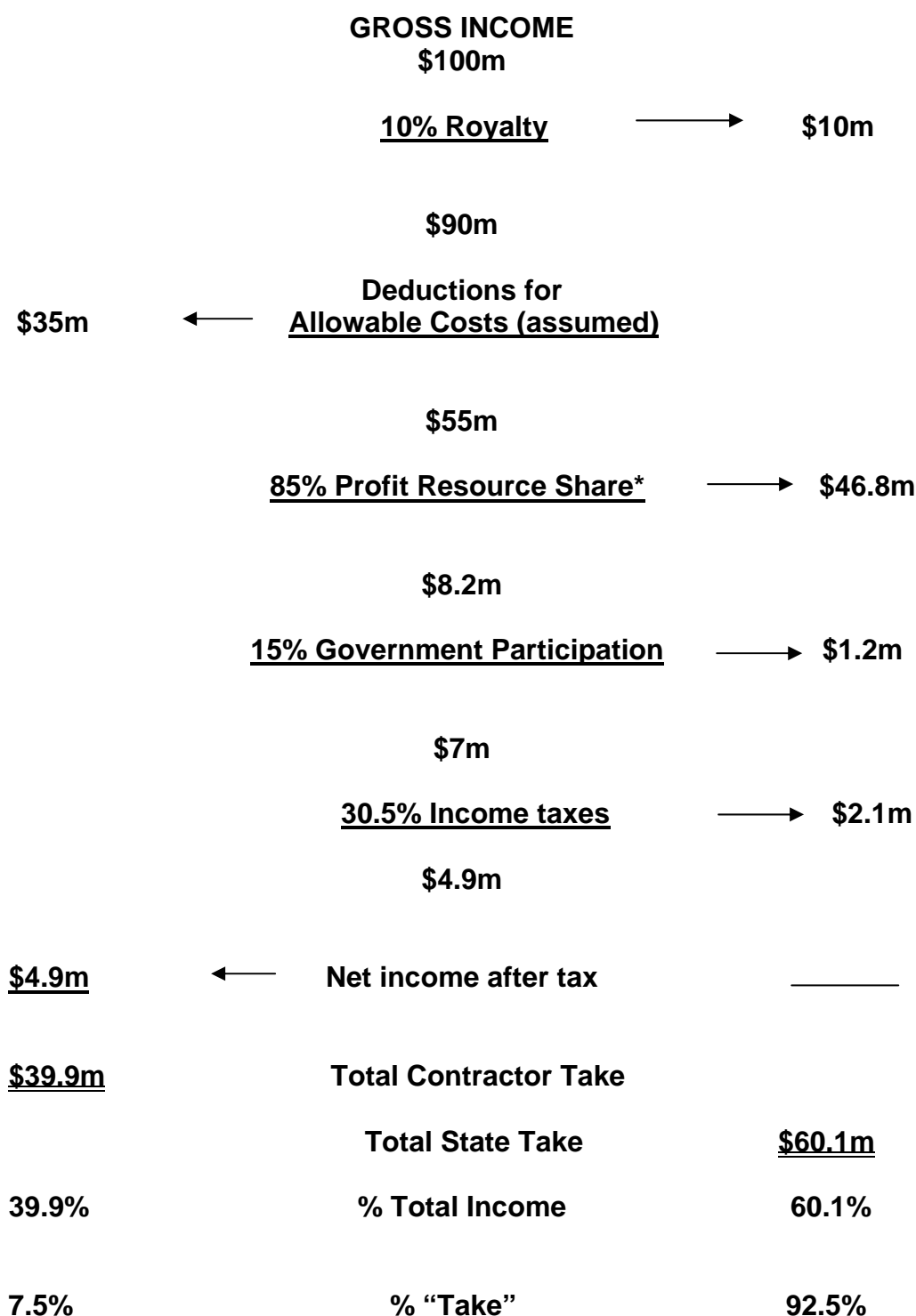


FLOW DIAGRAM FOR MYANMAR
1992 – NEW E&P BLOCKS

Based on Gross Income of \$100m

Contractor Share

State Take



*= Profit Resource Share varies between 65-90% depending on production

Myanmar –1992 Onshore IOR

Contract Type: Production Sharing Contract

% Government Take: 90%

Core Taxes Used:

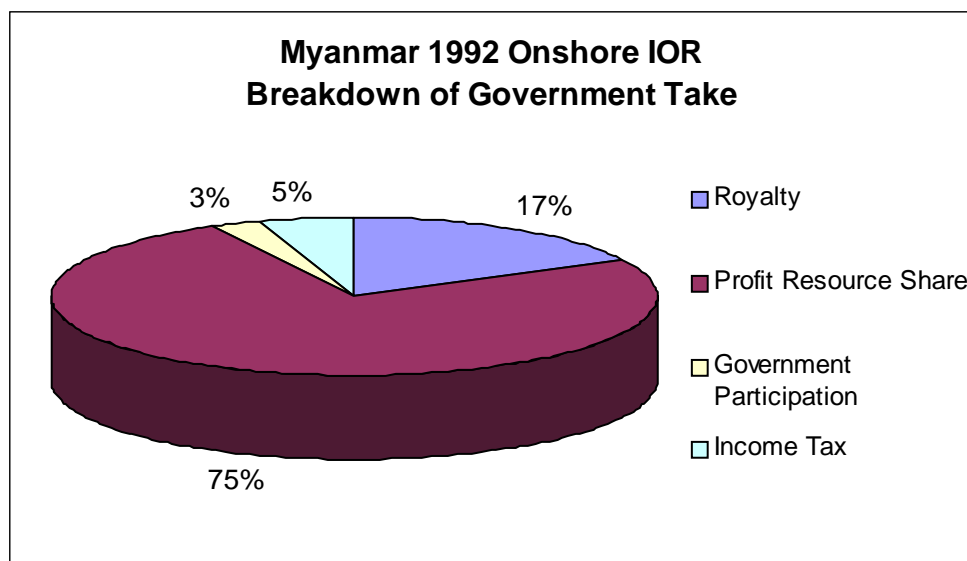
- 1) Royalty – 10%
- 2) Profit Resource Share – 80%
- 3) Government Participation – 15%
- 4) Income Taxes – 30.5%

- 1) Royalty of 10% taken from gross revenues.
- 2) After contractors cost recovery and deduction of royalties, resources are split according to a sliding scale based on production, with the government share ranging from 70-85%.
- 3) The government is entitled to a further 15% of the profit resource through participation
- 4) Corporate income tax is calculated at a rate of 30%, in addition a 0.5% research and development tax is levied at the same time. There is a tax holiday on income tax for the first 3 years according to Foreign Investment Law.

Other Taxes:

- Signature bonus
- Discovery bonus
- Production bonuses
- Training Fee

Cost Accounting: Cost recovery is limited to 40%

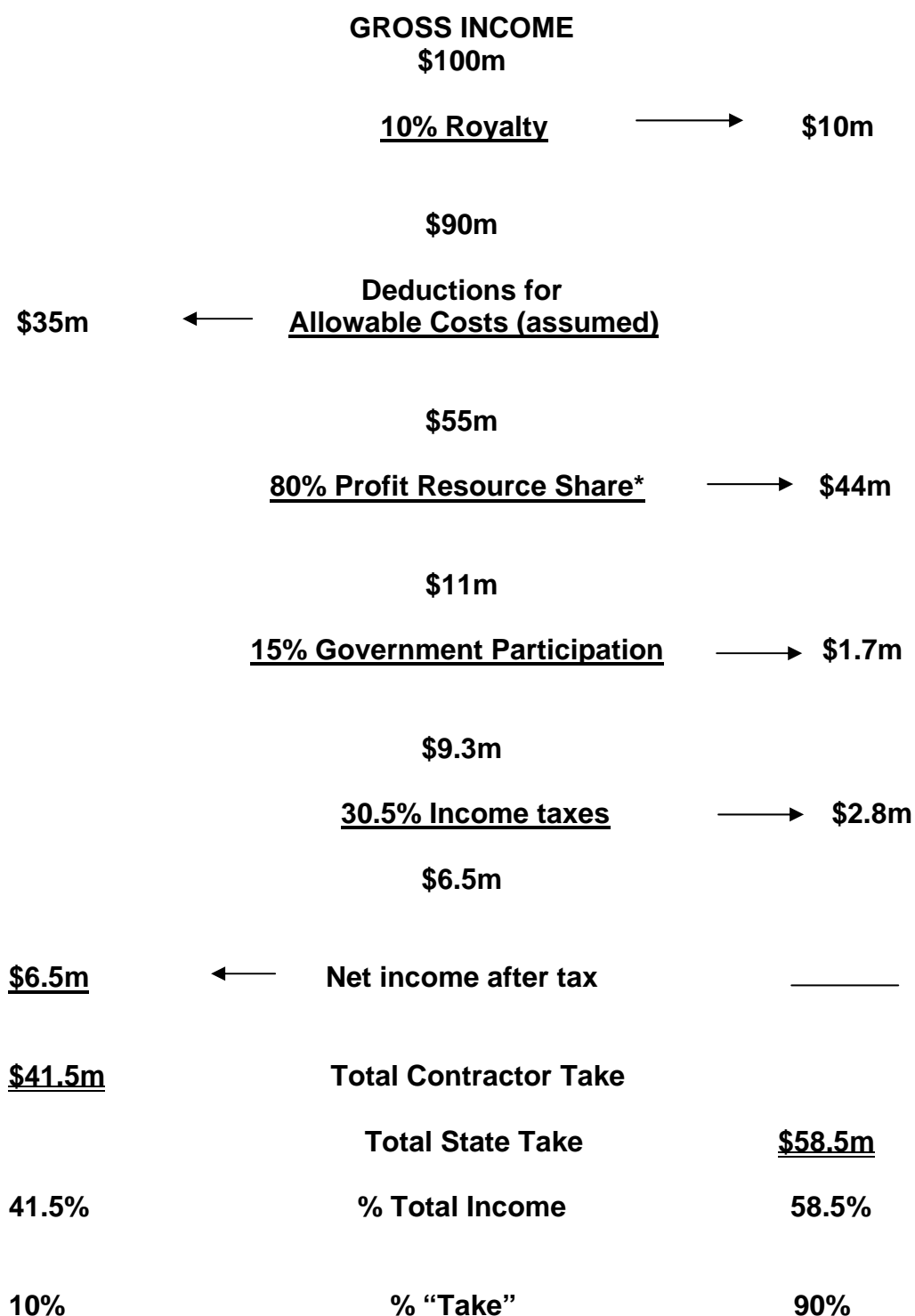


FLOW DIAGRAM FOR MYANMAR
1992 – IOR

Based on Gross Income of \$100m

Contractor Share

State Take



* = Profit Resource Share varies between 70-85% depending on production

Myanmar –1992 Onshore RSF

Contract Type: Production Sharing Contract

% Government Take: 76%

Core Taxes Used:

- 1) Royalty – 20%
- 2) Government Participation – 50%
- 3) Income Taxes – 30.5%

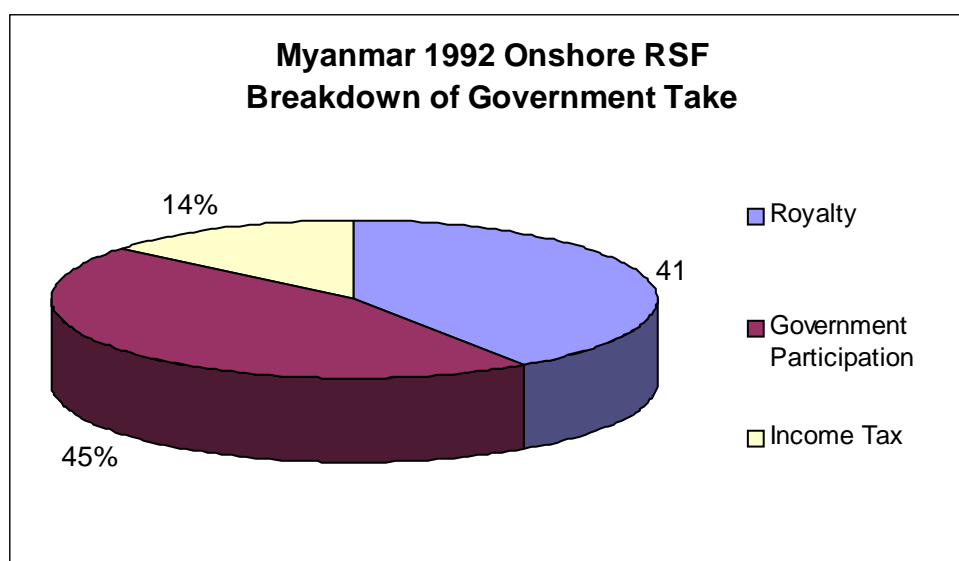
- 1) Royalty of 20% is calculated on gross revenues. This is made up of a 10% royalty and an additional 10% finders bonus which acts like an effective royalty.
- 2) The government is entitled to a further 15% of the profit resource through participation
- 3) Corporate income tax is calculated at a rate of 30%, in addition a 0.5% research and development tax is levied at the same time. There is a tax holiday on income tax for the first 3 years according to Foreign Investment Law.

Other Taxes: Signature bonus
Discovery bonus
Production bonuses

Training Fee

Domestic Market Obligations; 20% of the profit oil at 60% of world prices.

Cost Accounting: Cost recovery is limited to 40%



FLOW DIAGRAM FOR MYANMAR
1992 – RSF

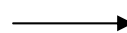
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

20% Royalty



\$20m

\$80m

Deductions for
Allowable Costs (assumed)



\$35m

\$45m

50% Government Participation



\$22.5m

\$22.5m

30.5% Income taxes



\$6.9m

\$15.6m



\$15.6m

Net income after tax



\$50.6m

Total Contractor Take

Total State Take

\$49.4m

50.6%

% Total Income

49.4%

24%

% “Take”

76%

** = Profit Resource Share varies between 70-85% depending on production*

Myanmar –1992 Offshore < 600ft

Contract Type: Production Sharing Contract

% Government Take: 92.5%

Core Taxes Used:

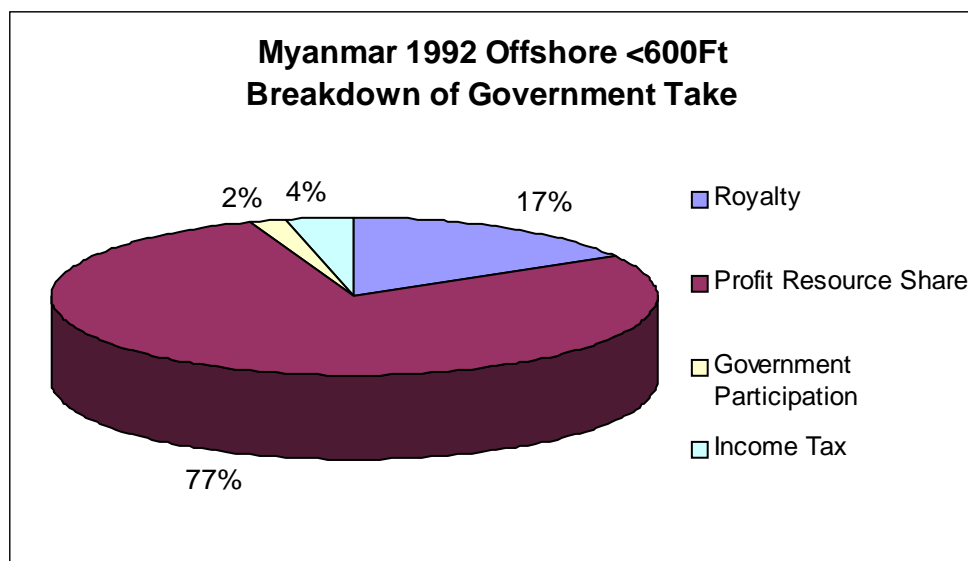
- 1) Royalty – 10%
- 2) Profit Resource Share – 85%
- 3) Government Participation – 15%
- 4) Income Taxes – 30.5%

- 1) Royalty of 10% taken from gross revenues.
- 2) After contractors cost recovery and deduction of royalties, resources are split according to a sliding scale based on production, with the government share ranging from 65-90% for gas (60-90% for oil).
- 3) The government is entitled to a further 15% of the profit resource through participation
- 4) Corporate income tax is calculated at a rate of 30%, in addition a 0.5% research and development tax is levied at the same time. There is a tax holiday on income tax for the first 3 years according to Foreign Investment Law.

Other Taxes: Signature bonus
Discovery bonus
Production bonuses

Training Fee

Cost Accounting: Cost recovery is limited to 50%

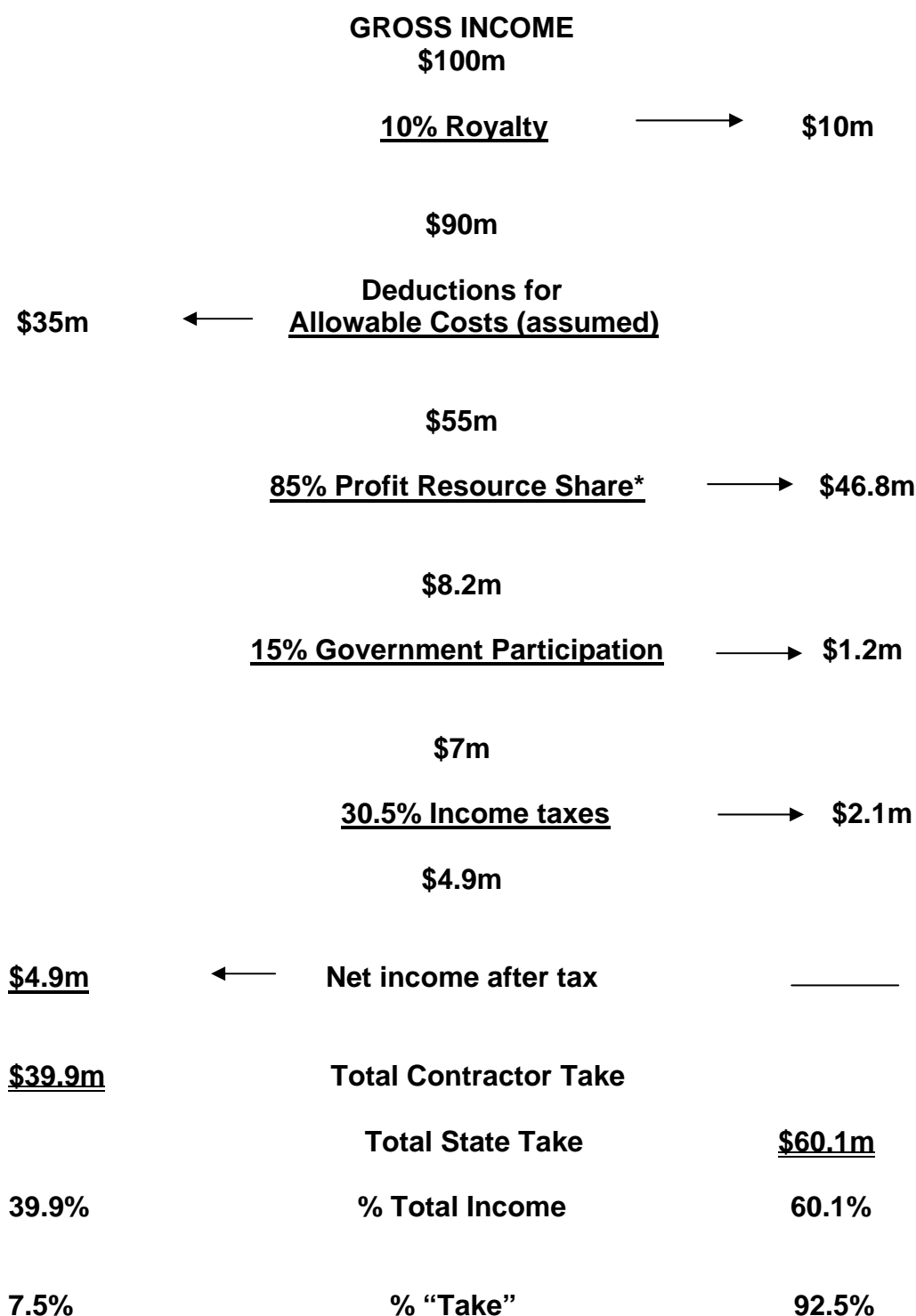


FLOW DIAGRAM FOR MYANMAR
1992 – OFFSHORE <600FT

Based on Gross Income of \$100m

Contractor Share

State Take



* = Profit Resource Share varies between 65-90% depending on production

Myanmar –1992 Offshore > 600ft

Contract Type: Production Sharing Contract

% Government Take: 90%

Core Taxes Used:

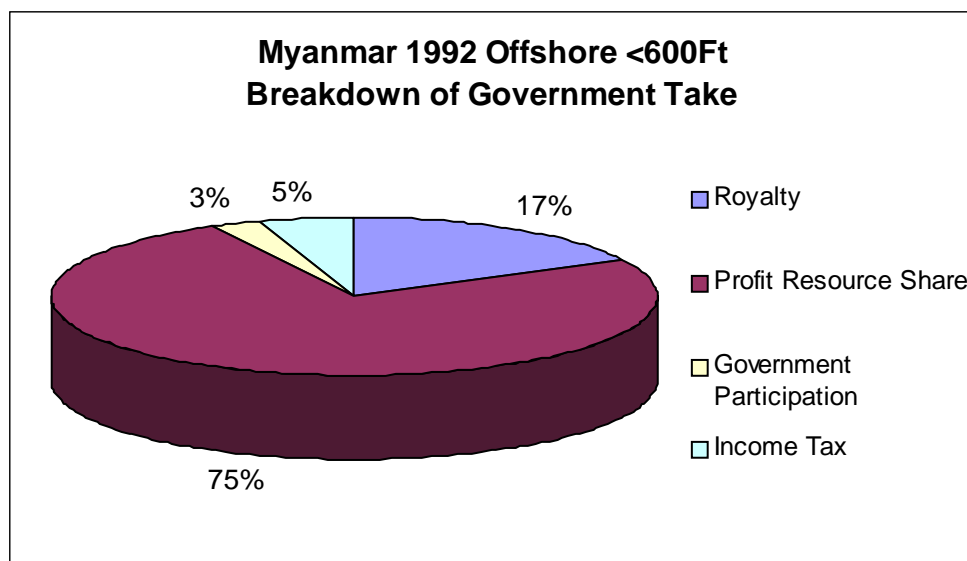
- 1) Royalty – 10%
- 2) Profit Resource Share – 80%
- 3) Government Participation – 15%
- 4) Income Taxes – 30.5%

- 1) Royalty of 10% taken from gross revenues.
- 2) After contractors cost recovery and deduction of royalties, resources are split according to a sliding scale based on production, with the government share ranging from 60-90%.
- 3) The government is entitled to a further 15% of the profit resource through participation
- 4) Corporate income tax is calculated at a rate of 30%, in addition a 0.5% research and development tax is levied at the same time. There is a tax holiday on income tax for the first 3 years according to Foreign Investment Law.

Other Taxes:

- Signature bonus
- Discovery bonus
- Production bonuses
- Training Fee

Cost Accounting: Cost recovery is limited to 50%

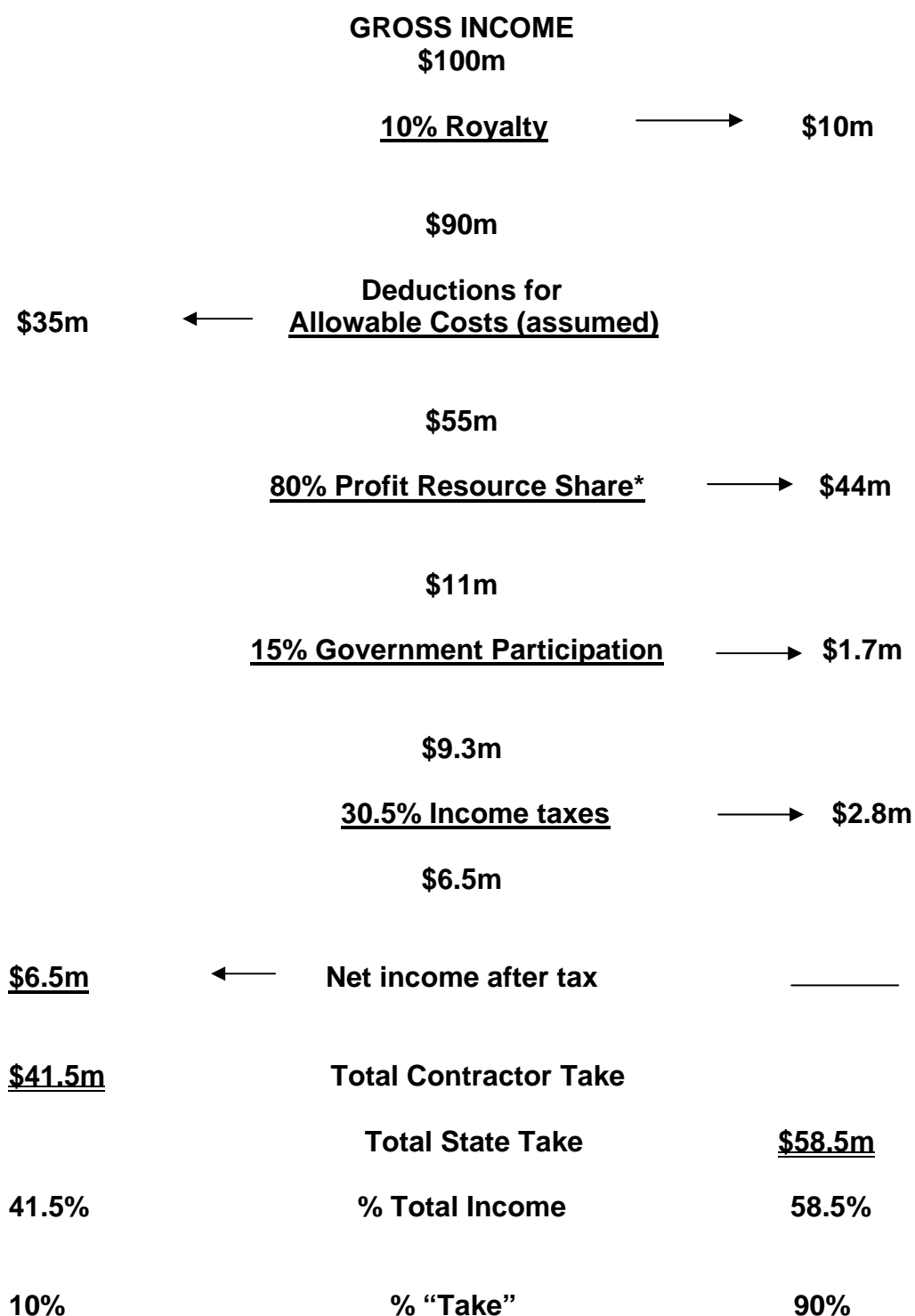


FLOW DIAGRAM FOR MYANMAR
1992 – OFFSHORE >600FT

Based on Gross Income of \$100m

Contractor Share

State Take



* = Profit Resource Share varies between 60-90% depending on production

Myanmar –1994 Model Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 83.1%

Core Taxes Used: 1) Royalty – 10%
2) Profit Resource Share – 80%

- 1) Royalty of 10% taken from gross revenues.
- 2) After contractors cost recovery and deduction of royalties, resources are split according to a sliding scale based on production. The government share varies from 70-85% for gas, and 65-90% for oil.

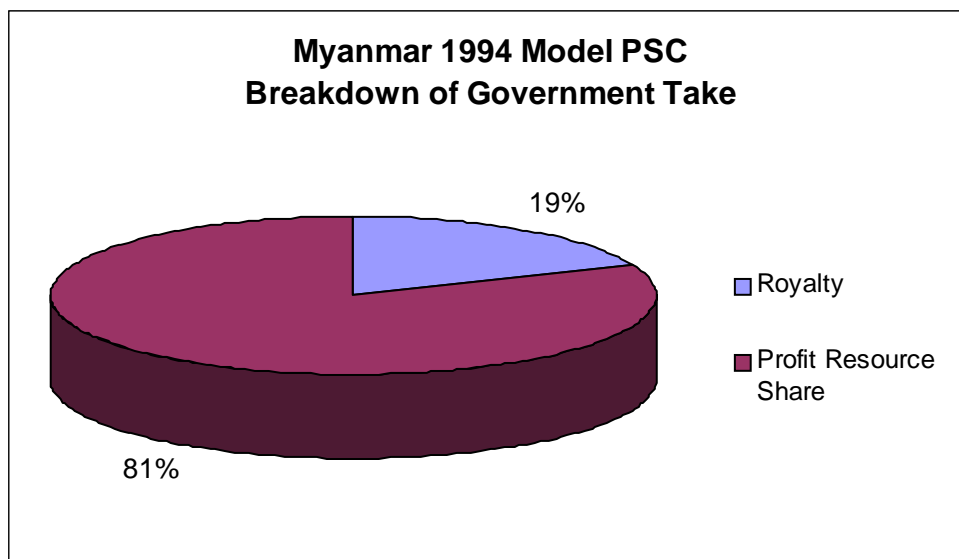
Other Taxes: Signature bonus
Production bonuses (including start up)

Training Fee

Domestic Market Obligation, the government is entitled to 0-20% of the contractors share of profit oil at 40% discount of world prices.

Cost Accounting: Development costs are depreciated on a straight line basis over a period of 4 years. Exploration costs are expensed

Cost recovery is limited to 40% onshore and 50% offshore

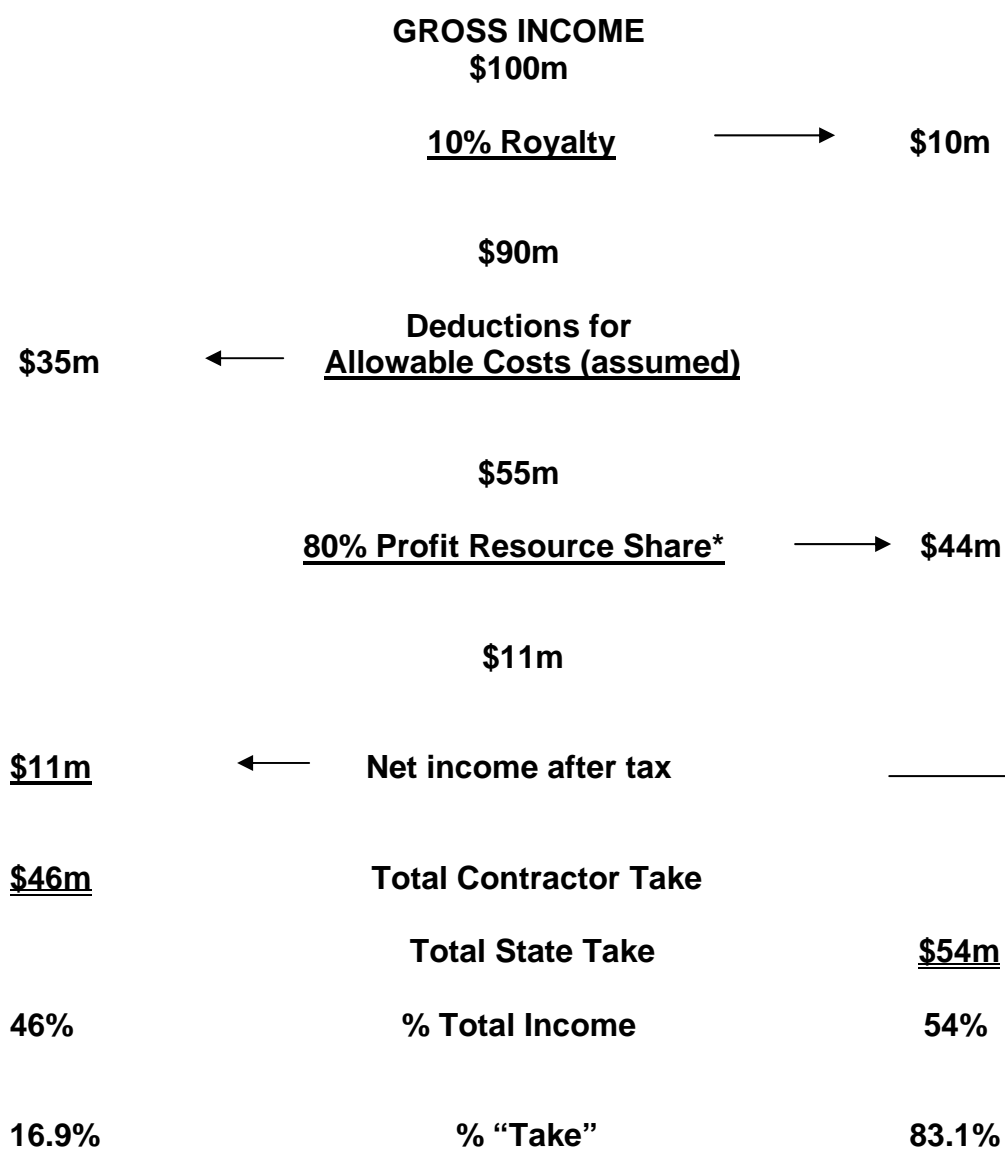


FLOW DIAGRAM FOR MYANMAR
1992 – OFFSHORE >600FT

Based on Gross Income of \$100m

Contractor Share

State Take



** = Profit Resource Share varies between 70-85% depending on production*

Myanmar –1995 AIPN Newsletter Example

Contract Type: Production Sharing Contract

% Government Take: 91.2%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit Resource Share – 82.5%
- 3) Government Participation – 15%
- 4) Income Taxes – 30%

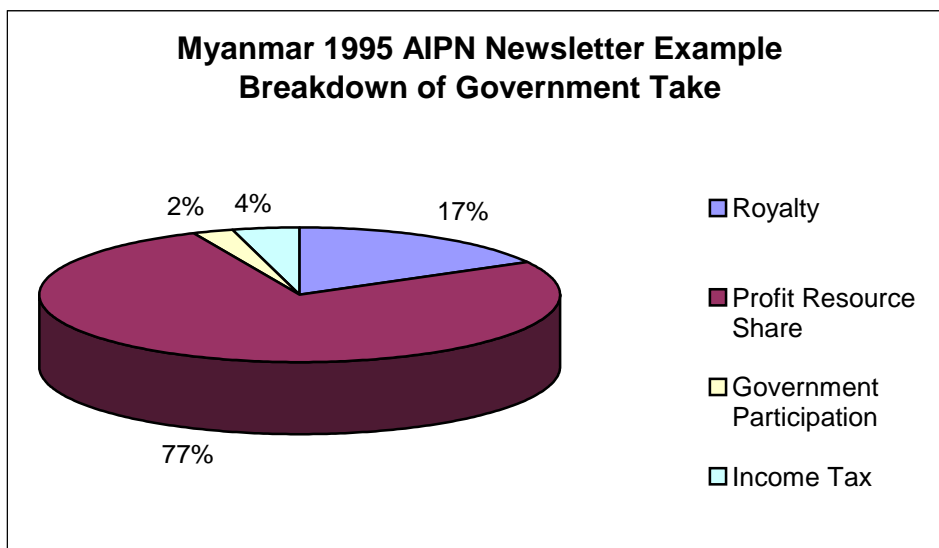
- 1) Royalty of 10% taken from gross revenues.
- 2) After contractors cost recovery and deduction of royalties, resources are split according to a sliding scale based on production, with the government share ranging from 56.6-87.5%.
- 3) The government is entitled to a further 15% of the profit resource through participation
- 4) Corporate income tax is calculated at a rate of 30%.

Other Taxes:

- Signature bonus
- Discovery bonus
- Production bonuses
- Training Fee

Domestic Market Obligation; 0-100% of contractors share of profit oil; 20% paid for in local currency at 20% discount on world process, and 80% paid US\$ (no discount).

Cost Accounting: Development costs are depreciated on a straight line basis over a period of 4 years.
Cost recovery is limited to 50%

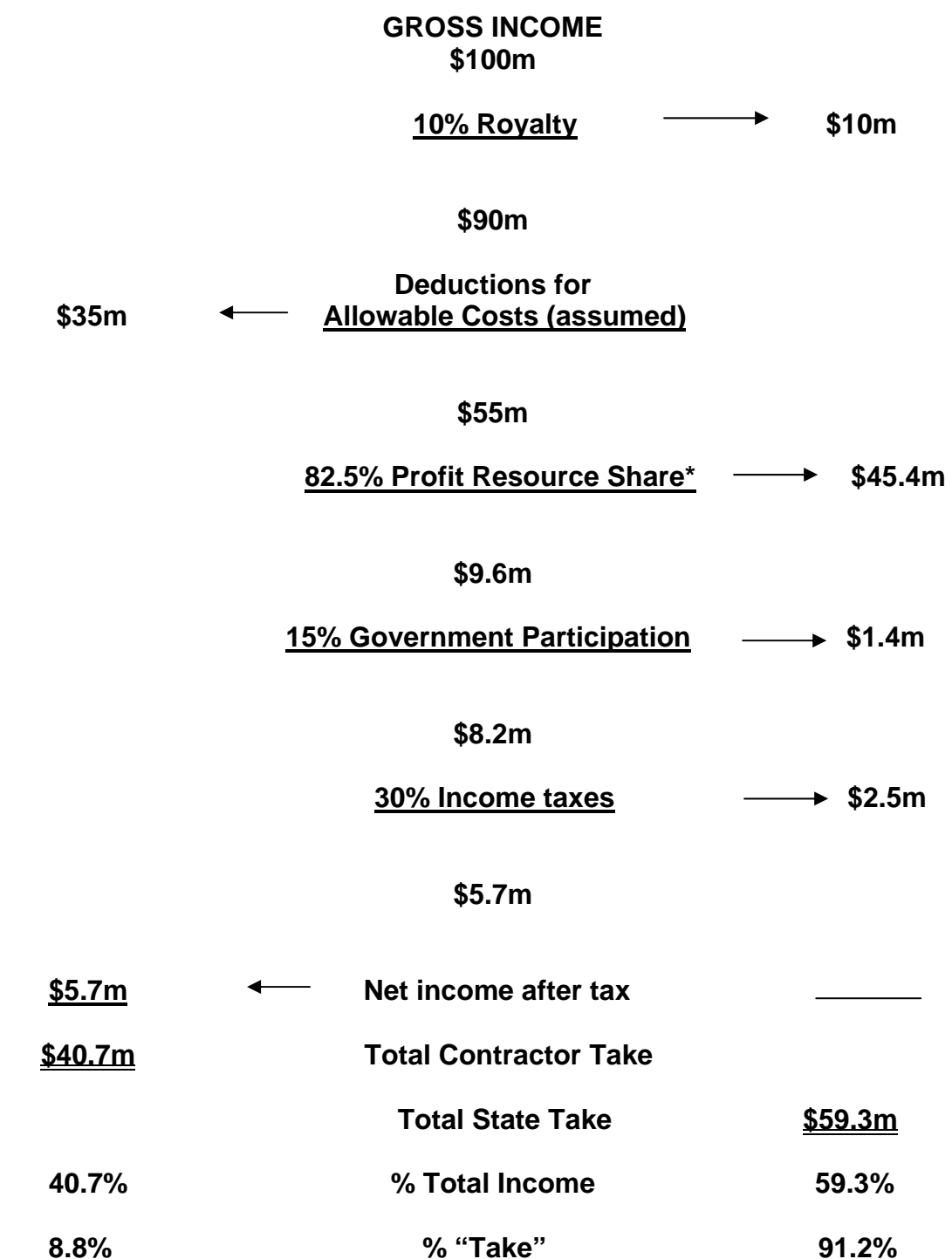


FLOW DIAGRAM FOR MYANMAR
1992 – OFFSHORE >600FT

Based on Gross Income of \$100m

Contractor Share

State Take



* = Profit Resource Share varies between 56.5-87.5% depending on production

Nigeria – 1973 Ashland Production Sharing Contract

Contract Type: Production Sharing Contract

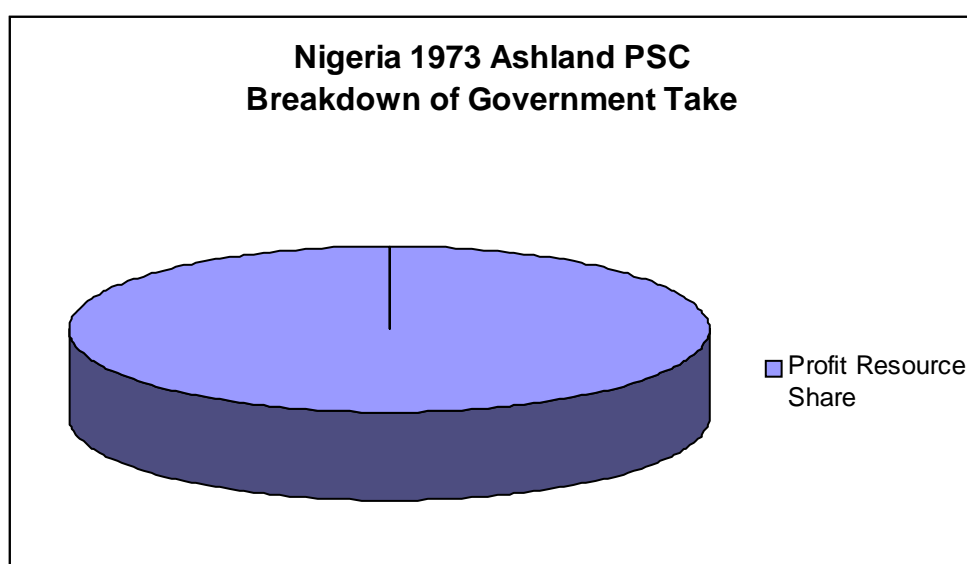
% Government Take: 70%

Core Taxes Used: 1) Profit resource share – 70%

- 1) Resources are shared between the contractor and government depending on a two tiered step based on production. The tiers are 65/35% and 70/30%, both in favour of the government.

Cost Accounting: Ring-fencing applies for cost recovery purposes

Cost recovery is limited to 40%



FLOW DIAGRAM FOR NIGERIA
1973 ASHLAND PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$65m

70% Profit resource share → **\$45.5m**

\$19.5m

\$19.5m ← **Net income after tax**

\$54.5m **Total Contractor Take**

Total State Take **\$45.5m**

54.5% **% Total Income** **45.5%**

30% **% "Take"** **70%**

Nigeria – 1986 Memorandum of Understanding

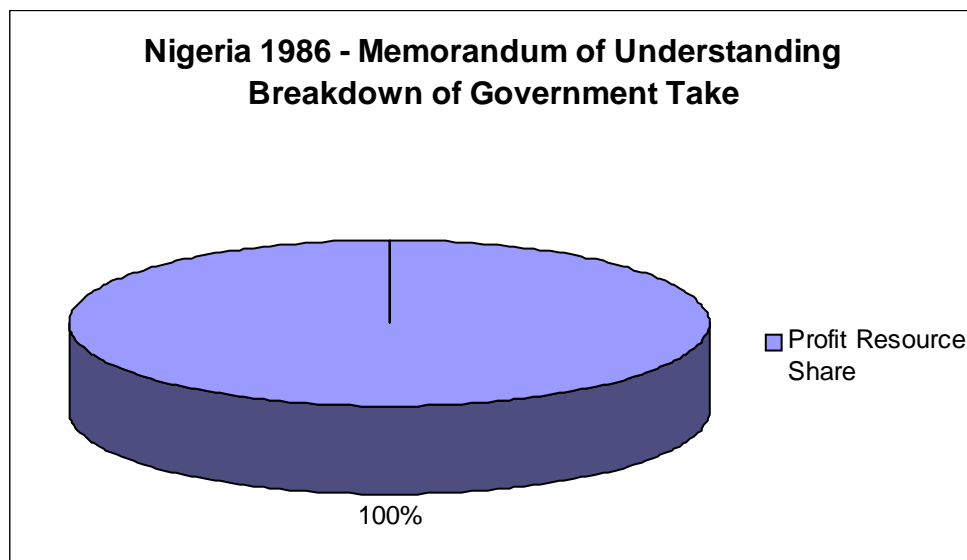
Contract Type: Production Sharing Contract

% Government Take: 85%

Core Taxes Used: 1) Profit resource share – 85%

- 1) Government share of profit resource comes after a guaranteed \$ level of return for the contractor per barrel of oil (“notional margin”). A guaranteed but fixed \$ cost recovery level is also permitted, (i.e. this does not increase as a % of gross revenues). Both these levels increase with oil prices. The government effectively shelters the contractor’s risk in less profitable ventures, due to the guaranteed margin rates. Figure here is 85%, which reflects medium/large profitable fields with average oil prices.

Cost Accounting: Cost-recovery is a fixed rate, rather than a % of gross revenues. At average oil prices, this equates to a C/R limit of around 20%.



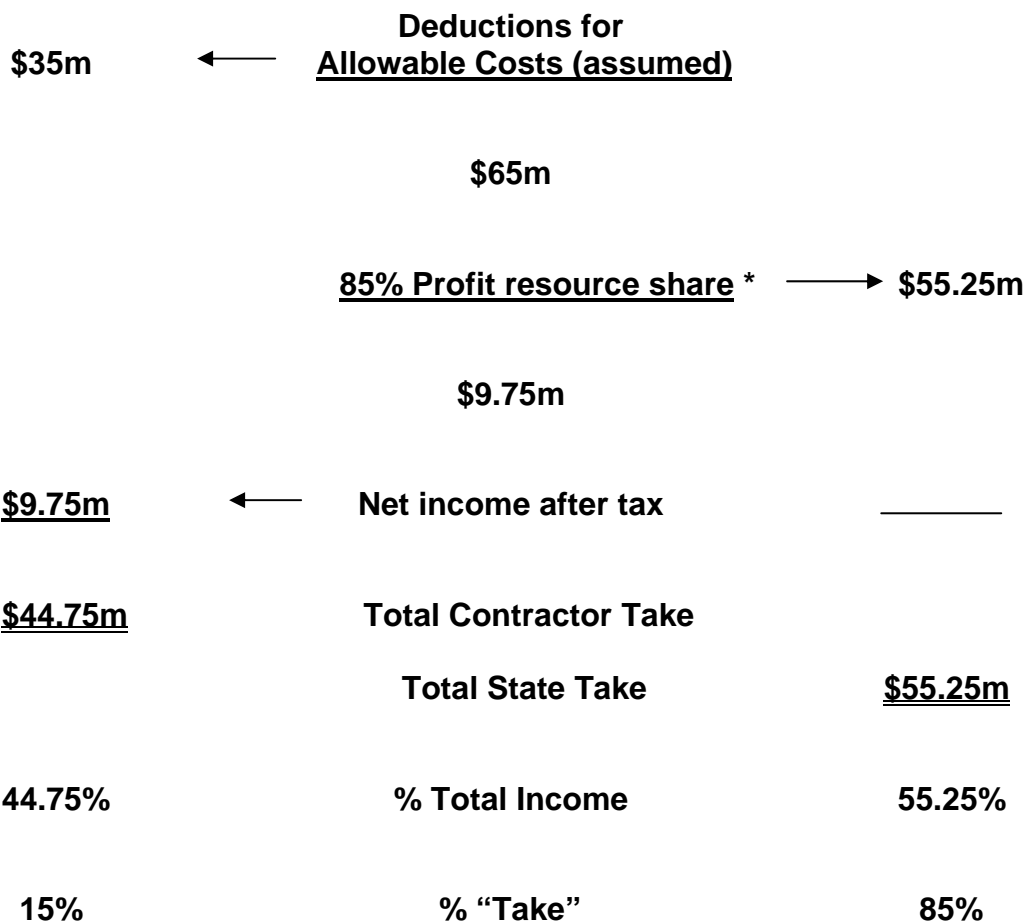
FLOW DIAGRAM FOR NIGERIA
1986 MEMORANDUM OF UNDERSTANDING

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m



** = Government resource share is what remains after "guaranteed margin" to contractor. This is at a fixed \$ level and thus varies widely as a % of net revenues. In larger fields with average oil prices, 85% government resource share is realistic.*

Nigeria – 1990 PSC Onshore and Niger Delta

Contract Type: Production Sharing Contract

% Government Take: 86.3%

Core Taxes Used:

- 1) Royalty - 18%
- 2) Income Tax – 50%
- 3) Profit resource share – 62%

- 1) Royalty is calculated on gross revenues, and can vary between 16.67-20%.
- 2) Income tax takes the form of a Petroleum Profits Tax, levied at 50% of the contractors share after royalties and costs.
- 3) Resources are shared between the contractor and government depending on production. Government share varies between 60-65%.

Other Taxes: Signature bonus
Production bonuses

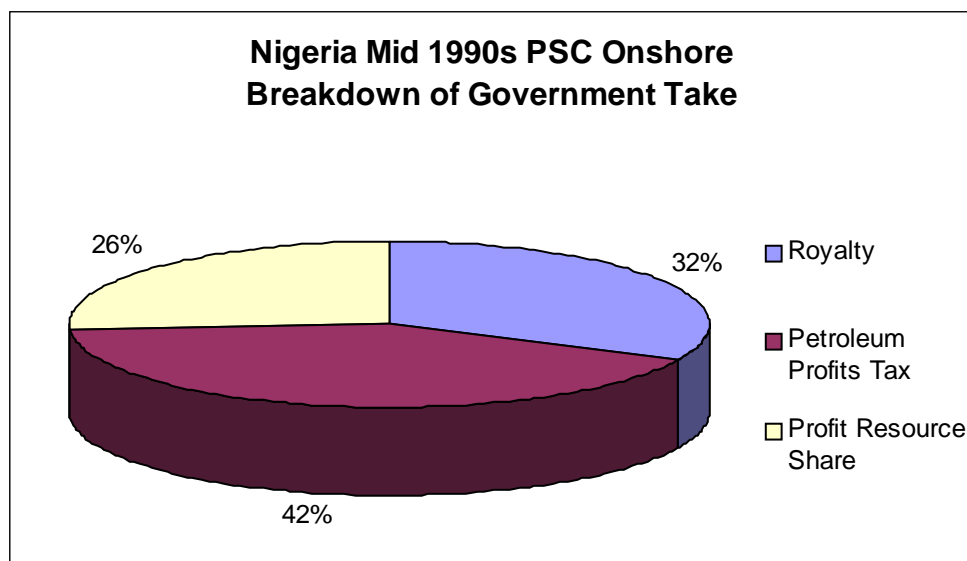
2% Education Tax

Domestic market obligation are possible

Cost Accounting: Capital costs are depreciated on a straight line basis over a period of 5 years.

Ring-fencing applies for cost recovery purposes, but not for PPT.

Cost recovery is limited to 40%
20-50% investment credits



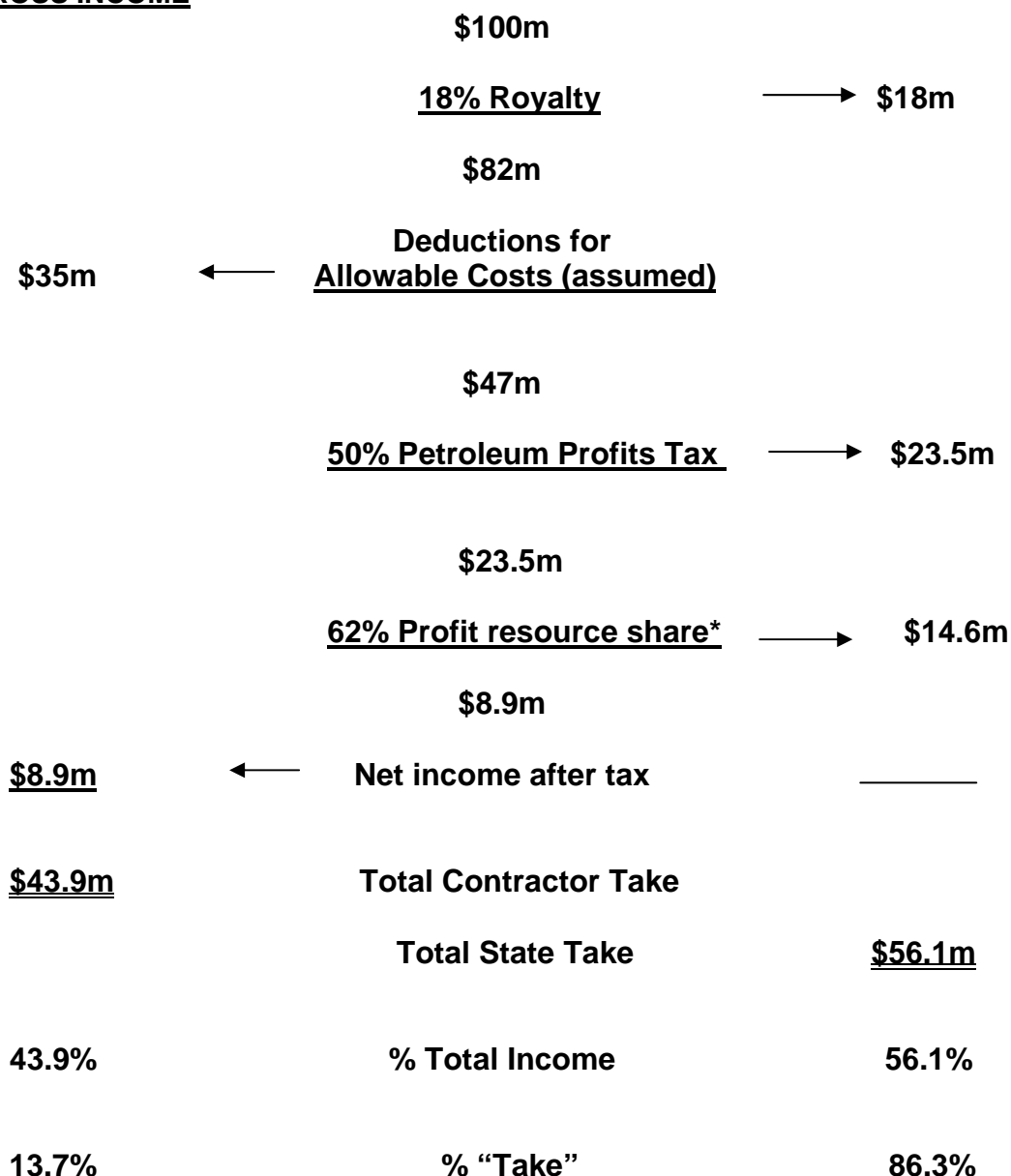
FLOW DIAGRAM FOR NIGERIA
1990 PSC ONSHORE AND NIGER DELTA

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME



*= Profit resource share varies between 60-65% depending on production

Nigeria – 1994 Model Production Sharing Contract (Shallow Water)

Contract Type: Production Sharing Contract

% Government Take: 79.7%

Core Taxes Used:

- 1) Royalty - 12%
- 2) Income Tax – 50%
- 3) Profit resource share – 50%

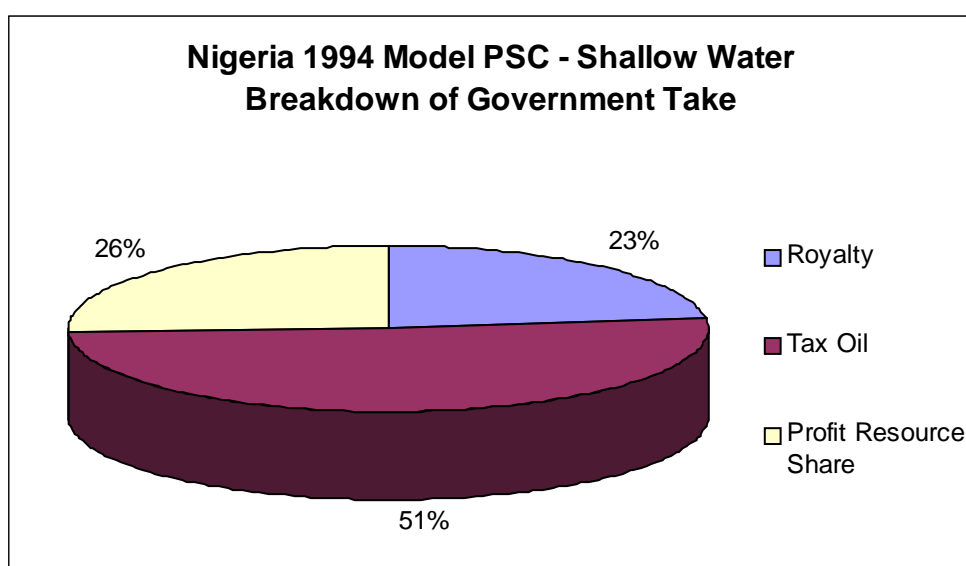
- 1) Royalty is calculated on gross revenues, and varies between 0-16.67% depending on the water depth. In the above example 12% represents a depth of between 200-500m
- 2) Income tax takes the form of a “Tax Oil”, levied at 50%.
- 3) Resources are shared between the contractor and government depending on production. Government share varies between 20-60%, with the uppermost tranche being open to negotiation.

Other Taxes: Signature bonus
Production bonuses
Rentals

Cost Accounting: Capital costs are depreciated on a straight line basis over a period of 4 years.

Ring-fencing applies for cost recovery purposes, but not for “tax oil”.

Investment allowance of 50% on development capital excluding intangible drilling costs



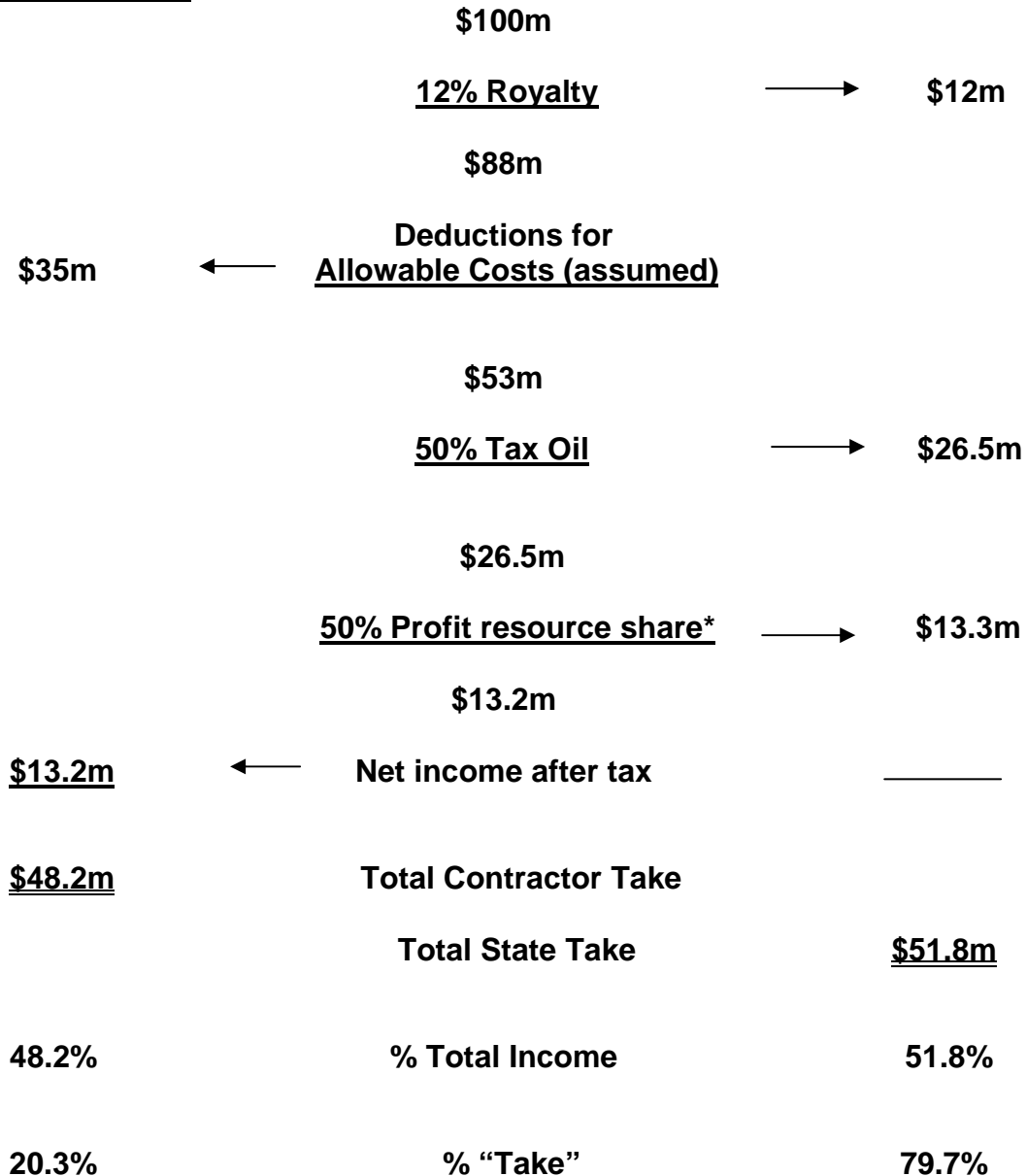
FLOW DIAGRAM FOR NIGERIA
1994 MODEL PSC SHALLOW

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME



*= Profit resource share varies between 20-60% depending on production

Nigeria – 1994 Model Production Sharing Contract (Deep Water)

Contract Type: Production Sharing Contract

% Government Take: 76.6%

Core Taxes Used:

- 1) Royalty - 4%
- 2) Income Tax – 50%
- 3) Profit resource share – 50%

- 1) Royalty is calculated on gross revenues, and varies between 0-16.67% depending on the water depth. In the above example 4% represents a depth of between 800-1000m
- 2) Income tax takes the form of a “Tax Oil”, levied at 50%.
- 3) Resources are shared between the contractor and government depending on production. Government share varies between 20-60%, with the uppermost tranche being open to negotiation.

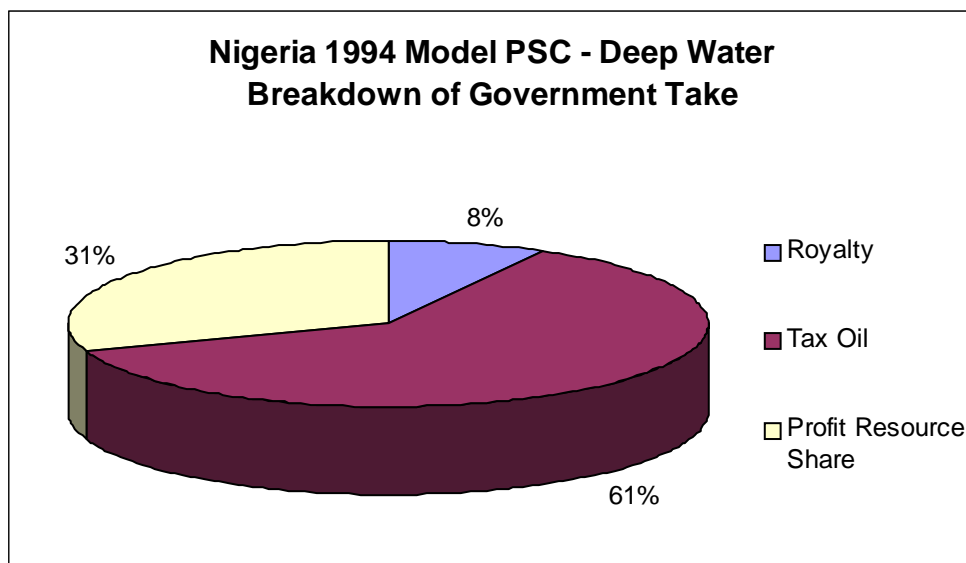
Other Taxes:

- Signature bonus
- Production bonuses
- Rentals

Cost Accounting: Capital costs are depreciated on a straight line basis over a period of 4 years.

Ring-fencing applies for cost recovery purposes, but not for “tax oil”.

Investment allowance of 50% on development capital excluding intangible drilling costs



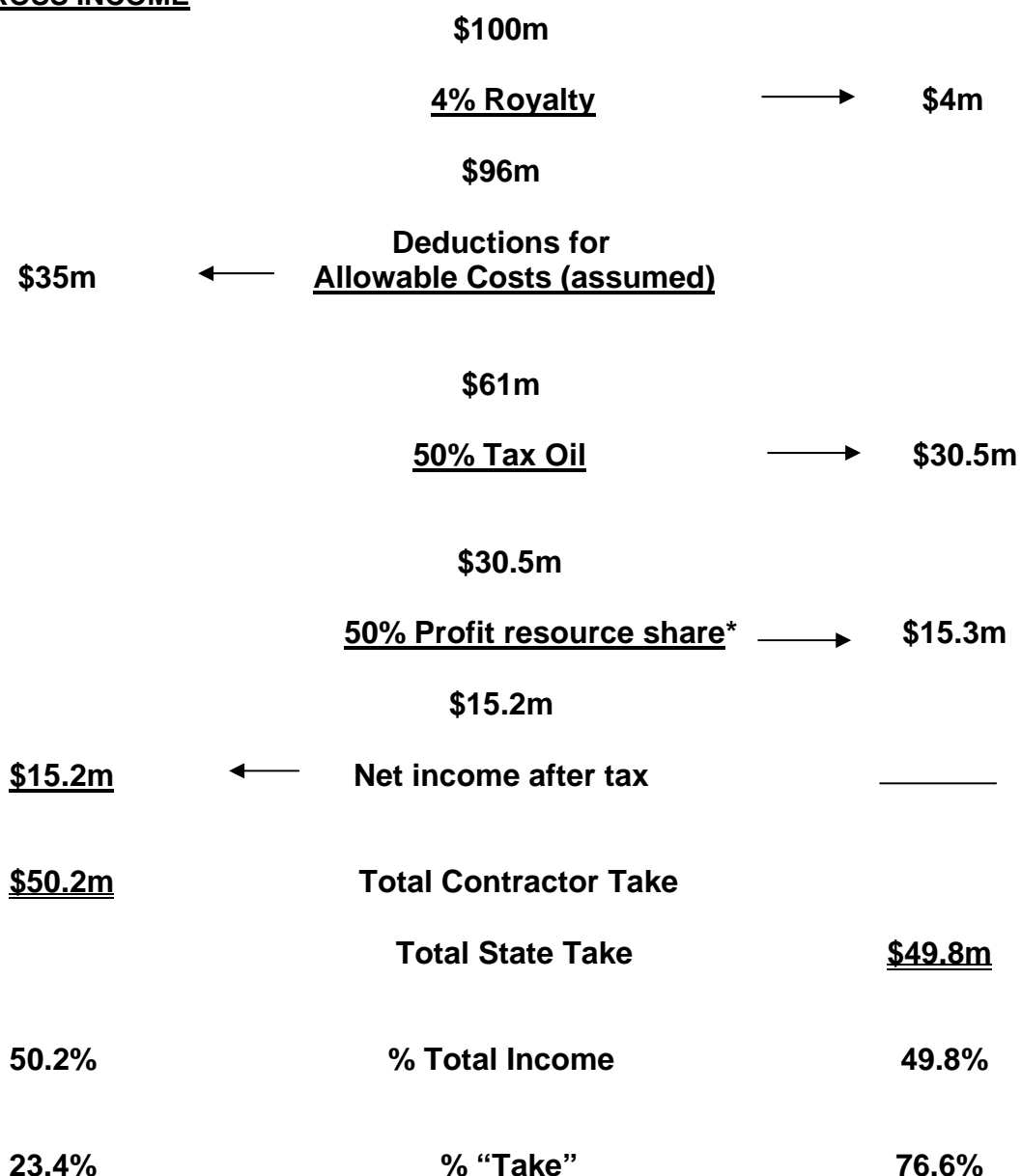
FLOW DIAGRAM FOR NIGERIA
1994 MODEL PSC DEEP WATER

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME



*= Profit resource share varies between 20-60% depending on production

Nigeria – 1994 Offshore Production Sharing Contract (Shell)

Contract Type: Production Sharing Contract

% Government Take: 81.8%

Core Taxes Used:

- 1) Royalty - 6%
- 2) Income Tax – 50%
- 3) Profit resource share – 60%

- 1) Royalty is calculated on gross revenues, and varies between 4-8% depending on the water depth.
- 2) Income tax takes the form of a “Petroleum Profit Tax”, levied at 50%.
- 3) Resources are shared between the contractor and government depending on production. Government share is two tiered, either 50% or 60%.

Other Taxes:

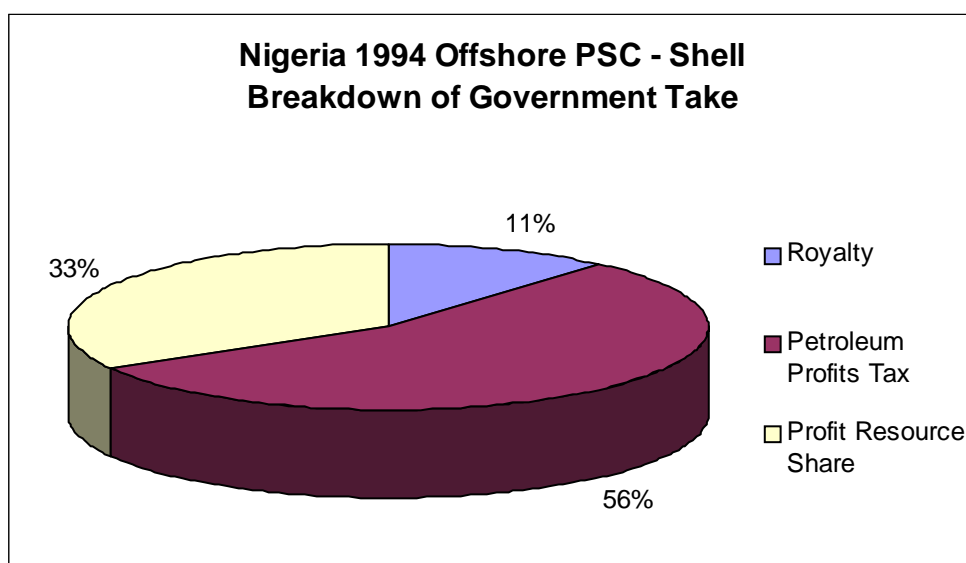
- Signature bonus
- Production bonuses
- Rentals

Domestic market obligation; government may have contractor purchase NNCP at discount.

Cost Accounting: Development costs are depreciated on a straight line basis over a period of 5 years. All exploration costs are expensed.

Ring-fencing applies by contract.

Investment credit of 50% on development capital excluding intangible drilling costs



FLOW DIAGRAM FOR NIGERIA
1994 OFFSHORE PSC (SHELL)

Based on Gross Income of \$100m

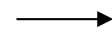
Contractor Share

State Take

GROSS INCOME

\$100m

6% Royalty



\$6m

\$94m

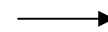
**Deductions for
Allowable Costs (assumed)**



\$35m

\$59m

50% Petroleum Profits Tax



\$29.5m

\$29.5m

60% Profit resource share*



\$17.7m

\$11.8m

\$11.8m



Net income after tax

\$46.8m

Total Contractor Take

Total State Take

\$53.2m

46.8%

% Total Income

53.2%

18.2%

% "Take"

81.8%

*= Profit resource share varies between 50-60% depending on production

Nigeria – 1994 Offshore Production Sharing Contract (Elf)

Contract Type: Production Sharing Contract

% Government Take: 75%

Core Taxes Used:

- 1) Royalty - 6%
- 2) Income Tax – 50%
- 3) Profit resource share – 45%

- 1) Royalty is calculated on gross revenues, and varies between 4-8% depending on the water depth.
- 2) Income tax takes the form of a “Petroleum Profit Tax”, levied at 50%.
- 3) Resources are shared between the contractor and government depending on production. Government share varies between 20-60%.

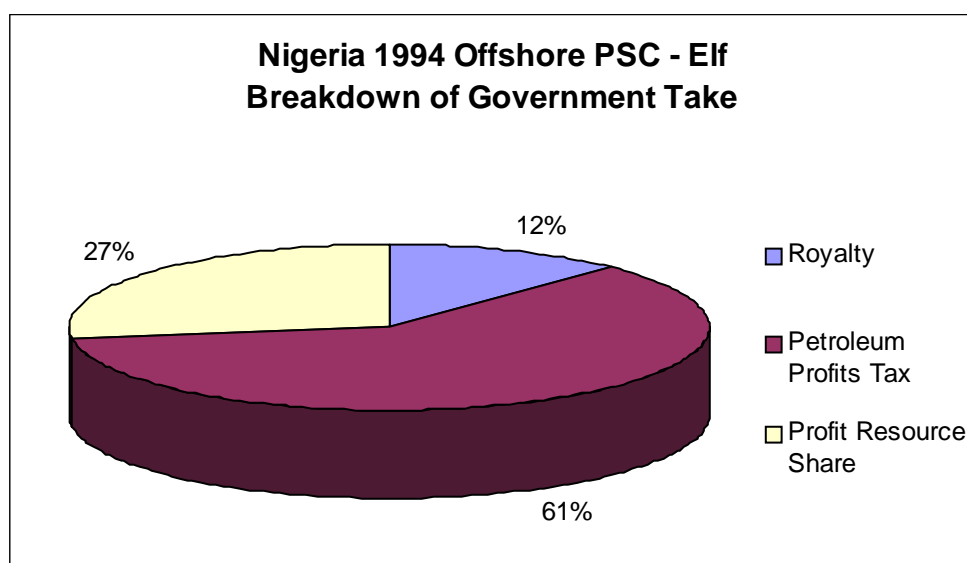
Other Taxes: Signature bonus
Production bonuses
Rentals

Domestic market obligation; government may have contractor purchase NNCP at discount.

Cost Accounting: Development costs are depreciated on a straight line basis over a period of 5 years. All exploration costs are expensed.

Ring-fencing applies by contract.

Investment credit of 50% on development capital excluding intangible drilling costs



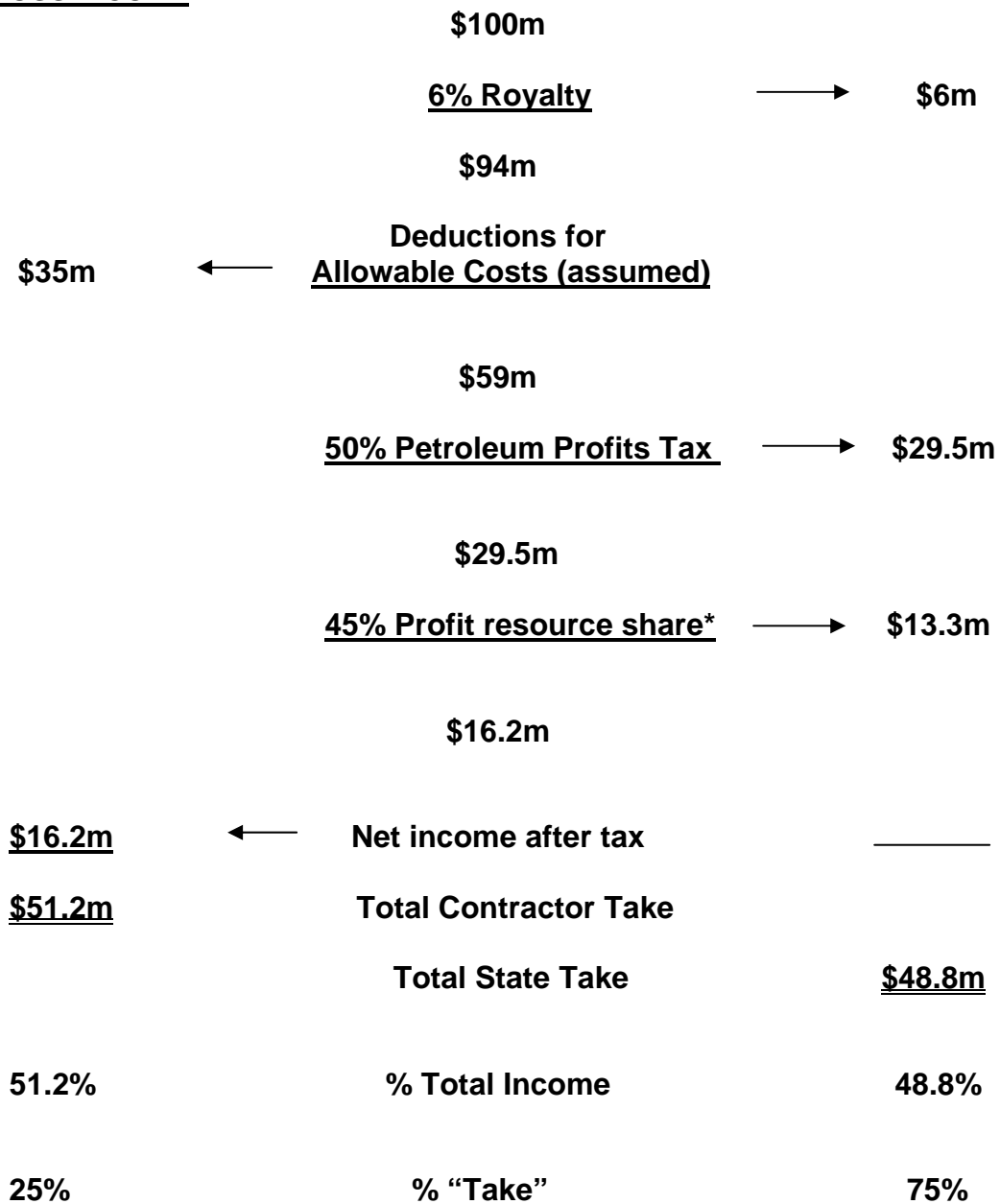
FLOW DIAGRAM FOR NIGERIA
1994 OFFSHORE PSC (ELF)

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME



*= Profit resource share varies between 20-60% depending on production

Nigeria – Marginal fields (Deep Water Example)

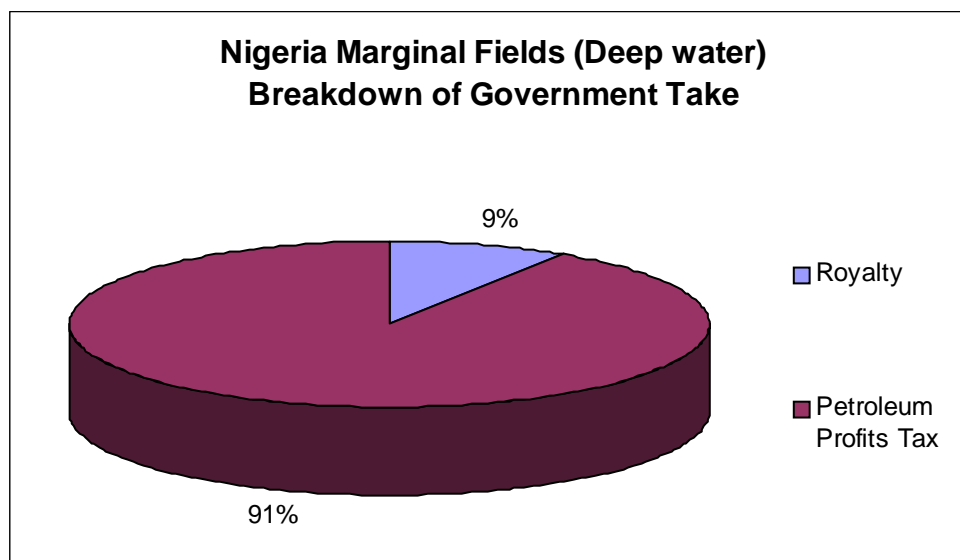
Contract Type: Royalty Tax System

% Government Take: 67.8%

Core Taxes Used: 1) Royalty - 4%
2) Income Tax – 65.75%

- 1) Royalty is calculated on gross revenues, and varies between 0-20% depending on the water depth. The rate used above (4%) represents a depth 801-1000m.
- 2) Income tax takes the form of a “Petroleum Profit Tax”, levied at 65.75%.

Cost Accounting: Investment credit of 50% on development capital excluding intangible drilling costs



FLOW DIAGRAM FOR NIGERIA
MARGINAL FIELDS

Based on Gross Income of \$100m

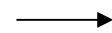
Contractor Share

State Take

GROSS INCOME

\$100m

4% Royalty



\$4m

\$96m

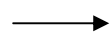
Deductions for
Allowable Costs (assumed)

\$35m



\$61m

65.75% Petroleum Profits Tax



\$40.1m

\$20.9m

\$20.9m



Net income after tax



\$55.9m

Total Contractor Take

Total State Take

\$44.1m

55.9%

% Total Income

44.1%

32.2%

% "Take"

67.8%

Nigeria – 2000 Licence Round (Deep Water Example)

Contract Type: Royalty Tax System

% Government Take: 67.8%

Core Taxes Used: 1) Royalty - 4%
2) Income Tax – 67.75%

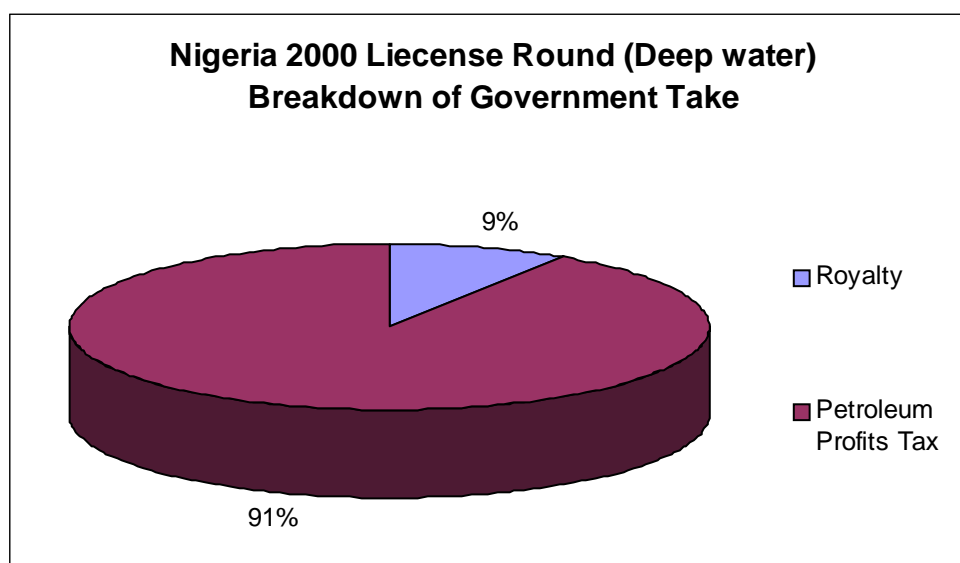
- 1) Royalty is calculated on gross revenues, and varies between 0-20% depending on the water depth. The rate used above (4%) represents a depth 801-1000m.
- 2) Income tax takes the form of a “Petroleum Profit Tax”, levied at 65.75% for the first 5 years rising to 85% thereafter.

Other Taxes: Signature bonus
Production bonuses
Rentals

Government participation is possible, however it is contract dependent and the values are unknown. Government Participation is assumed to be 0% in this example.

Cost Accounting: Ring-fencing applies by contract.

Investment allowance varies between 5-50% depending on location of field.



FLOW DIAGRAM FOR NIGERIA
2000 LICENSE ROUND (DEEP WATER)

Based on Gross Income of \$100m

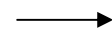
Contractor Share

State Take

GROSS INCOME

\$100m

4% Royalty



\$4m

\$96m

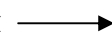
Deductions for
Allowable Costs (assumed)



\$35m

\$61m

65.75% Petroleum Profits Tax



\$40.1m

\$20.9m



\$20.9m

Net income after tax



\$55.9m

Total Contractor Take

Total State Take

\$44.1m

55.9%

% Total Income

44.1%

32.2%

% "Take"

67.8%

Nigeria – Production Sharing Contract on OPLs 98/118 AND 90/225

Contract Type: Production Sharing Contract

% Government Take: 89.8%

Core Taxes Used:

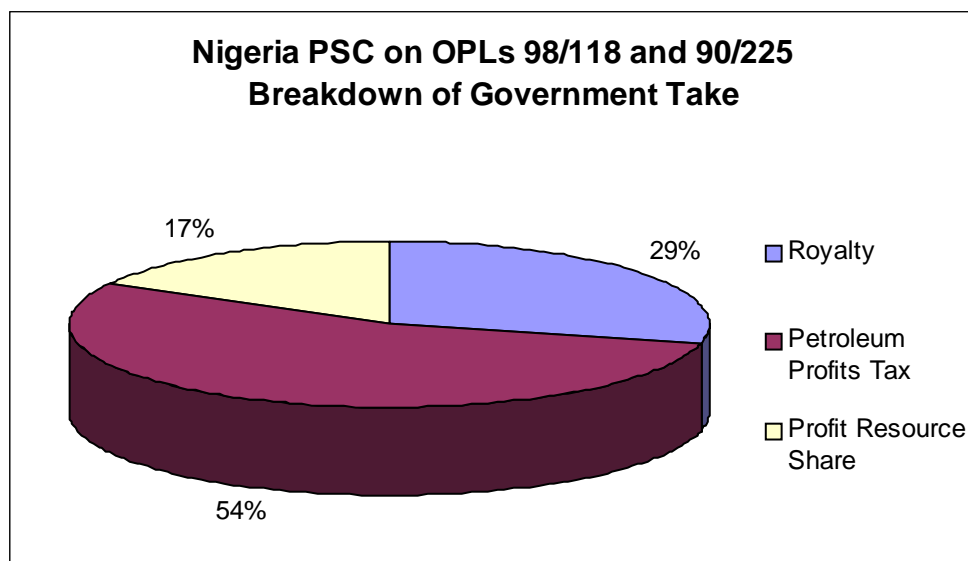
- 1) Royalty – 16.67%
- 2) Income Tax – 65.75%
- 3) Profit resource share – 60%

- 1) Royalty is calculated at 16.67% on gross revenues.
- 2) Income tax takes the form of a “Petroleum Profit Tax”, levied at 65.75% for the first 5 years rising to 85% thereafter.
- 3) Resources are shared between the contractor and government depending on production. The value is 60% for gas and between 20-60% for oil.

Other Taxes: Signature bonus
Production bonuses

Cost Accounting: Capital expenditure are depreciated on a straight line basis over a period of 5 years.

Ring-fencing applies for cost recovery purposes but not for petroleum profit tax.



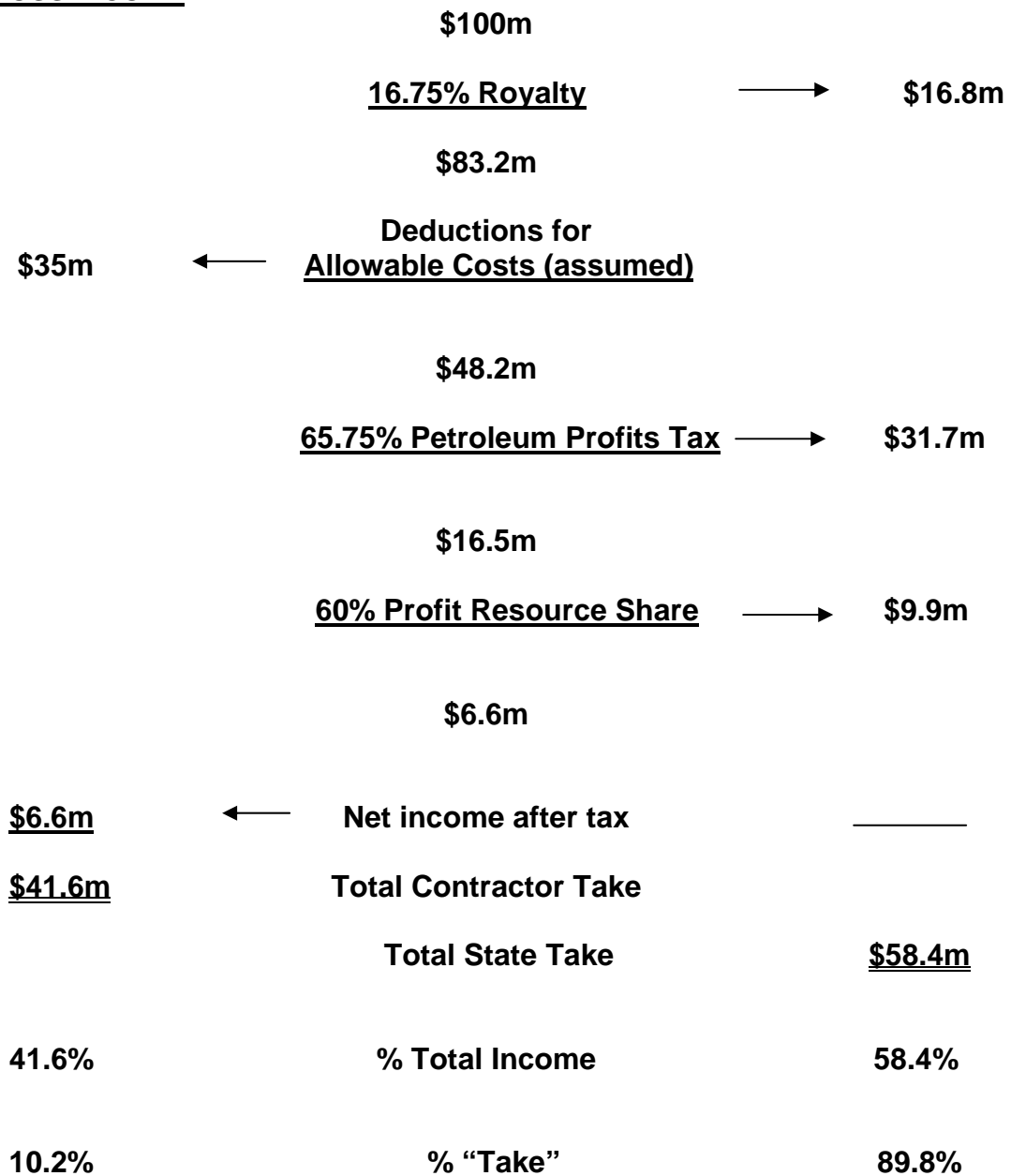
FLOW DIAGRAM FOR NIGERIA
PSC ON OPLs 98/118 AND 90/225

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME



Nigeria – 1998 Typical Arrangement with Local Partner, Block 215

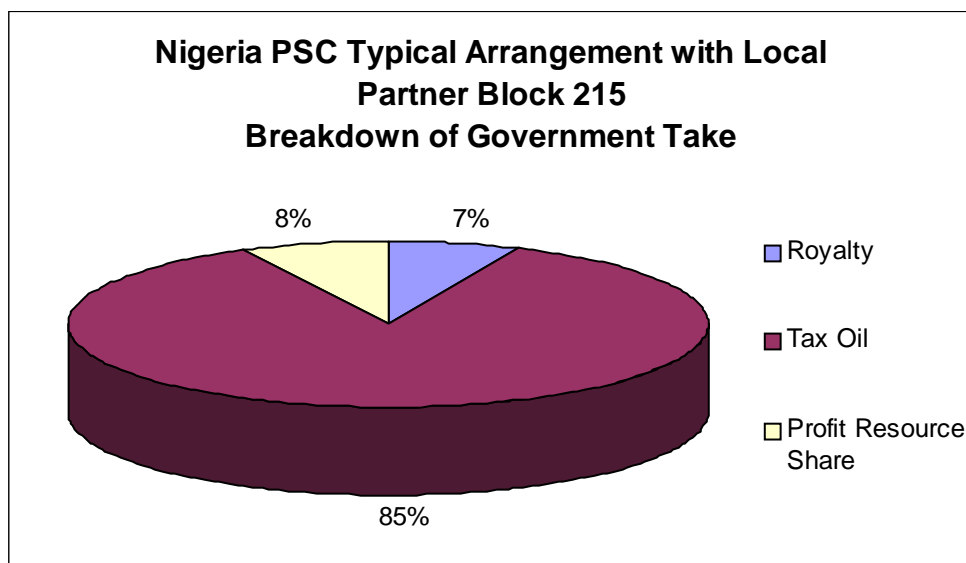
Contract Type: Production Sharing Contract

% Government Take: 93.1%

Core Taxes Used:

- 1) Royalty – 4%
- 2) Income Tax – 85%
- 3) Profit resource share – 50%

- 1) Royalty is calculated as 4% on gross revenues.
- 2) Income tax takes the form of a “Tax Oil”, levied at 85%
- 3) Resources are shared between the contractor and government depending on production. The value varied between 20-60% for oil.



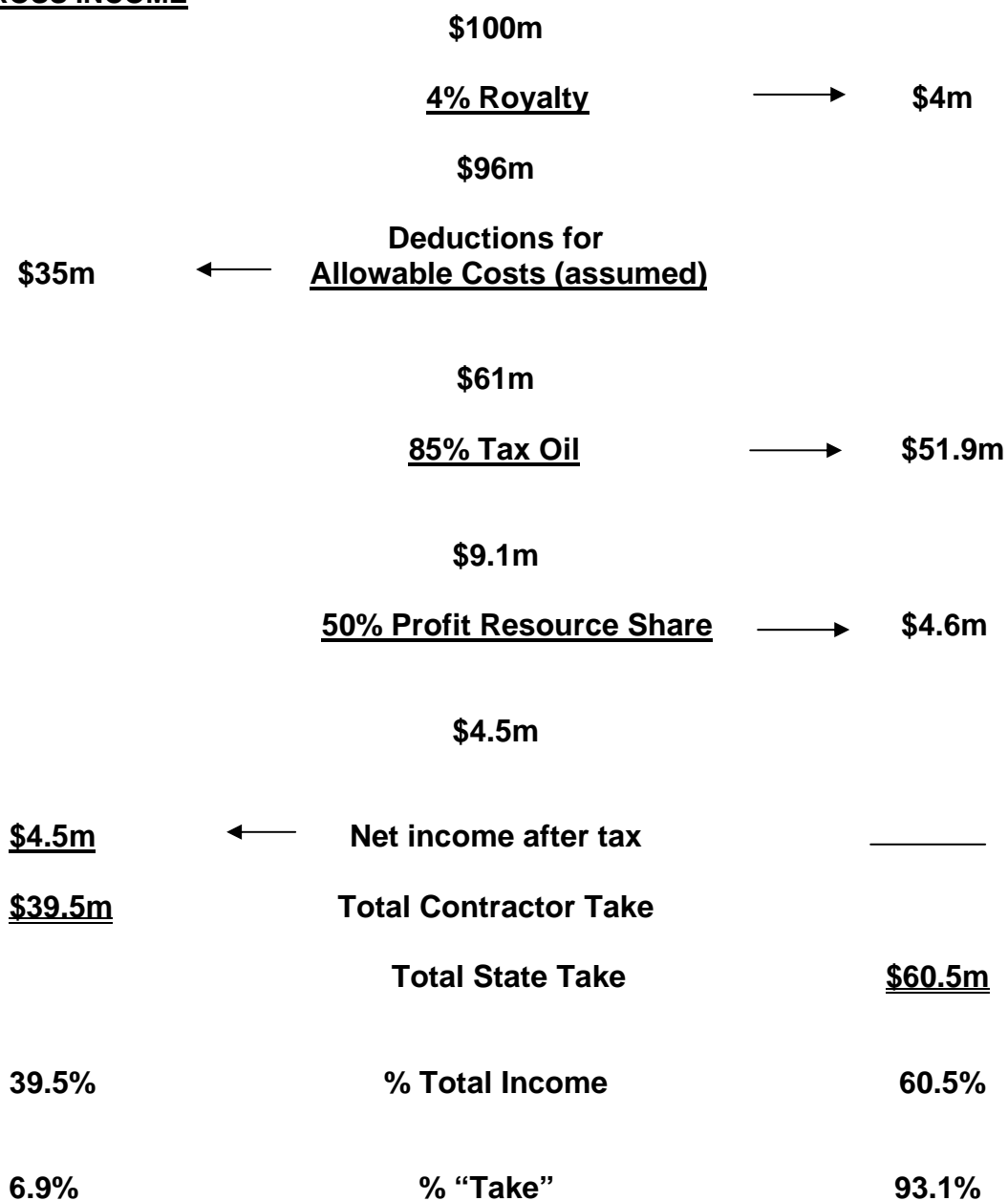
FLOW DIAGRAM FOR NIGERIA 1998
TYPICAL ARRANGEMENT WITH LOCAL PARTNER

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME



Norway– Late 1990s Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 78%

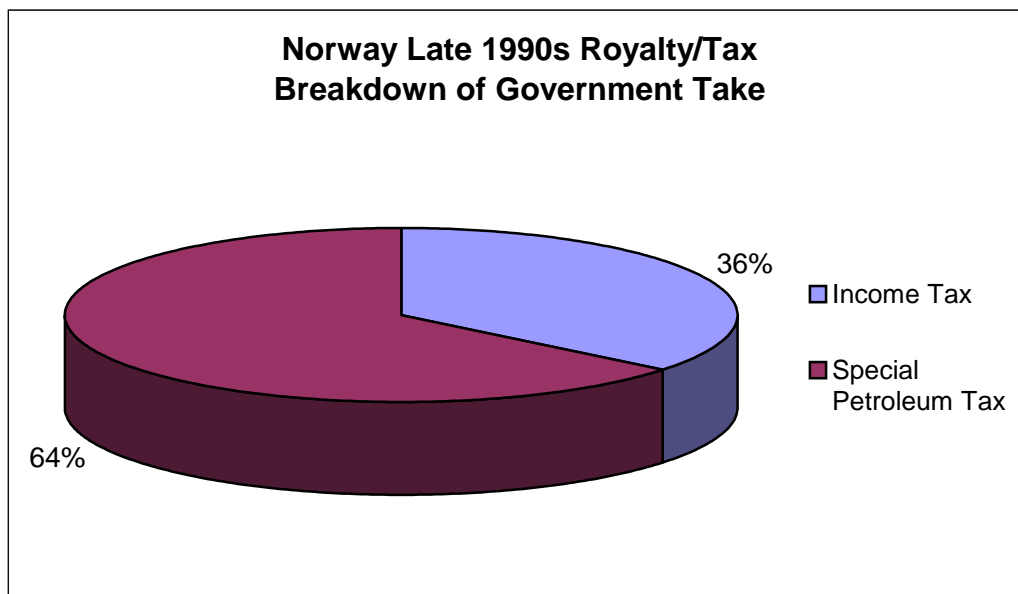
Core Taxes Used: 1) Royalty – 0%
2) Corporate Income Taxes – 78%

- 1) Royalty on new fields is 0% (between 1986-1992 ranged from 8-14%)
- 2) Corporate income tax is levied at a rate of 28% of gross revenues less costs. Additional “Special Petroleum Tax (SPT)” of 50% is also collected at this stage.

Cost Accounting: Capital costs depreciated using a straight line method over a period of 6 years.

Tax system is company based, not field based. Companies can deduct all costs and are taxed on a net profits basis.

5% uplift on development capital costs for 6 years (STP only)
15% Production allowance against (SPT only)

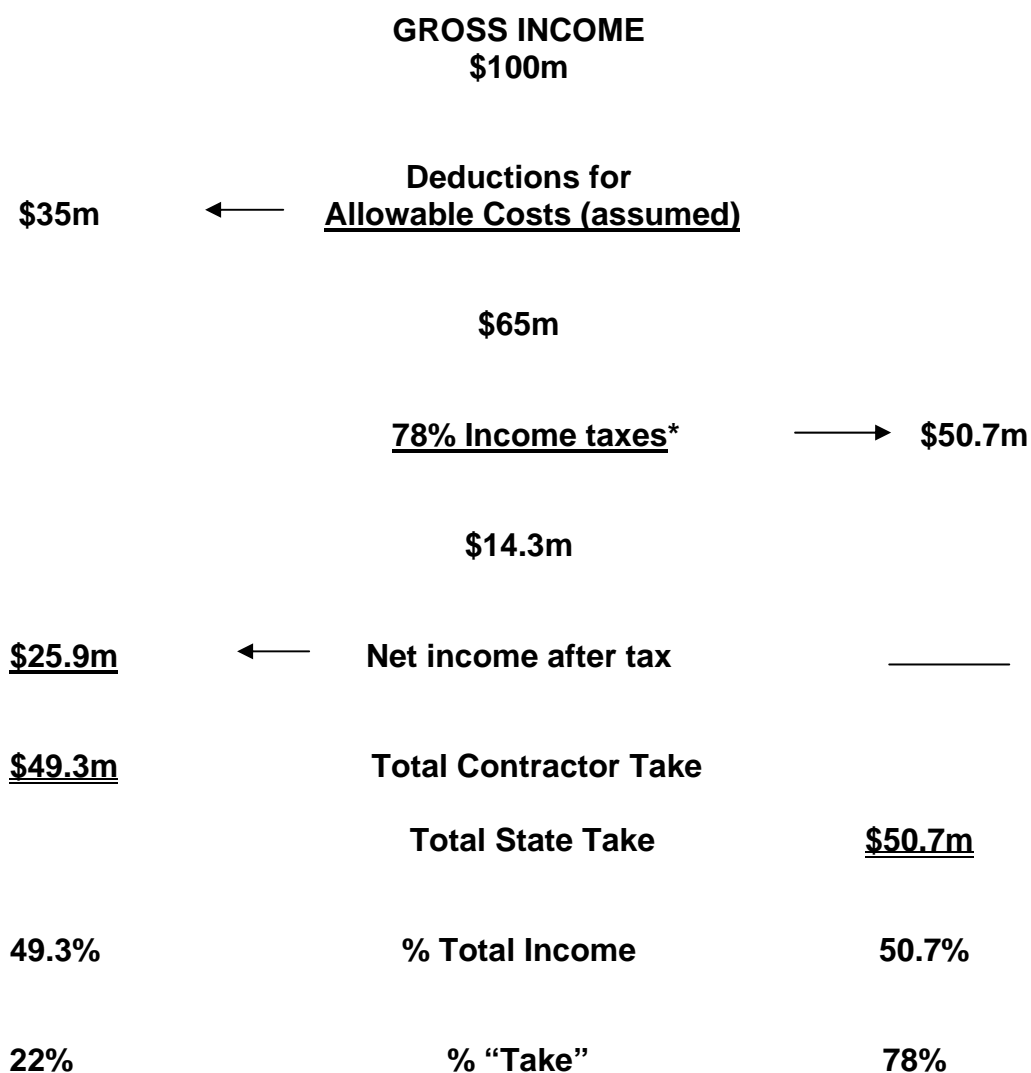


FLOW DIAGRAM FOR NORWAY
LATE 1990s – ROYALTY/TAX

Based on Gross Income of \$100m

Contractor Share

State Take



* = Tax comprises of 28% income tax, and 50% Special Petroleum Tax (STP)

Oman – 1989 Conquest Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 70%

Core Taxes Used: 1) Profit resource share – 70%

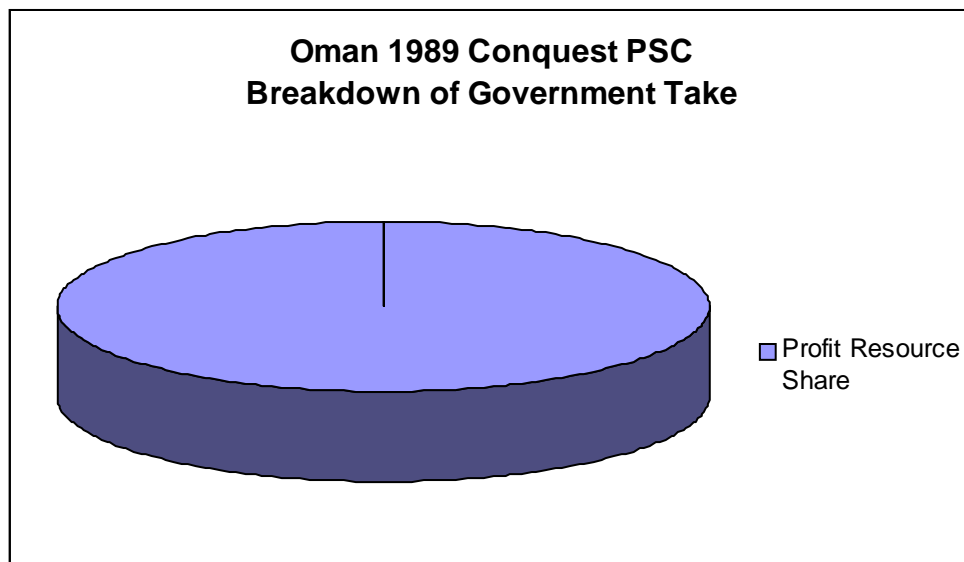
- 1) After contractors cost recovery, resources are shared as 70/30% for gas and 80/20% for oil, both in favour of the government

Other Taxes: Signature bonus
Production bonuses
Rental

Cost Accounting: All costs are expensed

Ring-fencing applies for cost recovery purposes.

Cost recovery is limited to 60% for gas production and 30-50% for oil.



FLOW DIAGRAM FOR OMAN
1989 CONQUEST PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$65m

70% Profit resource share → **\$45.5m**

\$19.5m

\$19.5m ← **Net income after tax** →

\$54.5m **Total Contractor Take**

Total State Take **\$45.5m**

54.5% **% Total Income** **45.5%**

30% **% "Take"** **70%**

Oman – 1992 Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 70%

Core Taxes Used: 1) Profit resource share – 70%

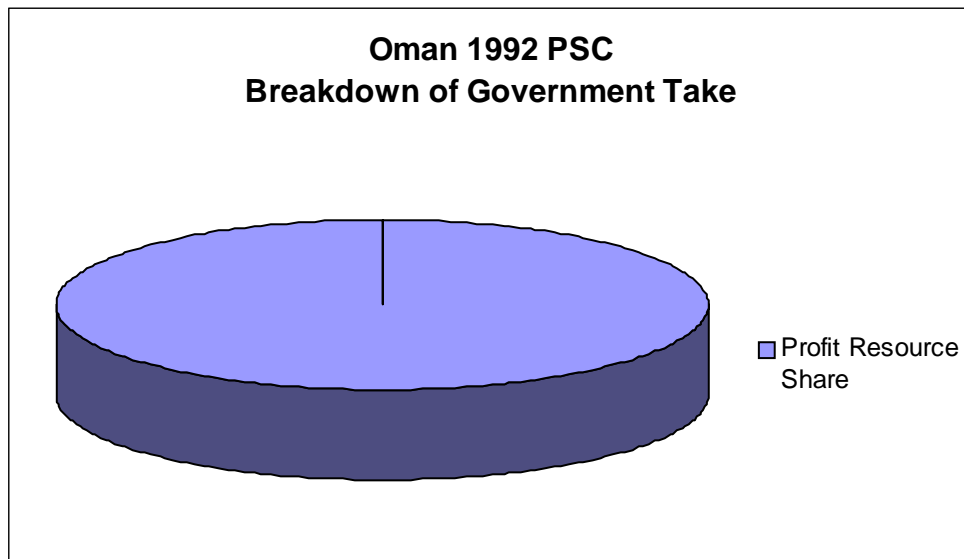
- 1) After contractors cost recovery, resources are shared as 70/30% for gas and 80/20% for oil, both in favour of the government.

Other Taxes: Signature bonus
Production bonuses

Cost Accounting: All costs are expensed

Ring-fencing applies for cost recovery purposes.

Cost recovery is limited to 50-60% for gas production and 40-50% for oil.



FLOW DIAGRAM FOR OMAN
1992 PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$65m

70% Profit resource share → **\$45.5m**

\$19.5m

\$19.5m ← **Net income after tax** →

\$54.5m **Total Contractor Take**

Total State Take **\$45.5m**

54.5% **% Total Income** **45.5%**

30% **% "Take"** **70%**

Pakistan – 1977 Royalty/Tax Badin

Contract Type: Royalty Tax System

% Government Take: 75.7%

Core Taxes Used:

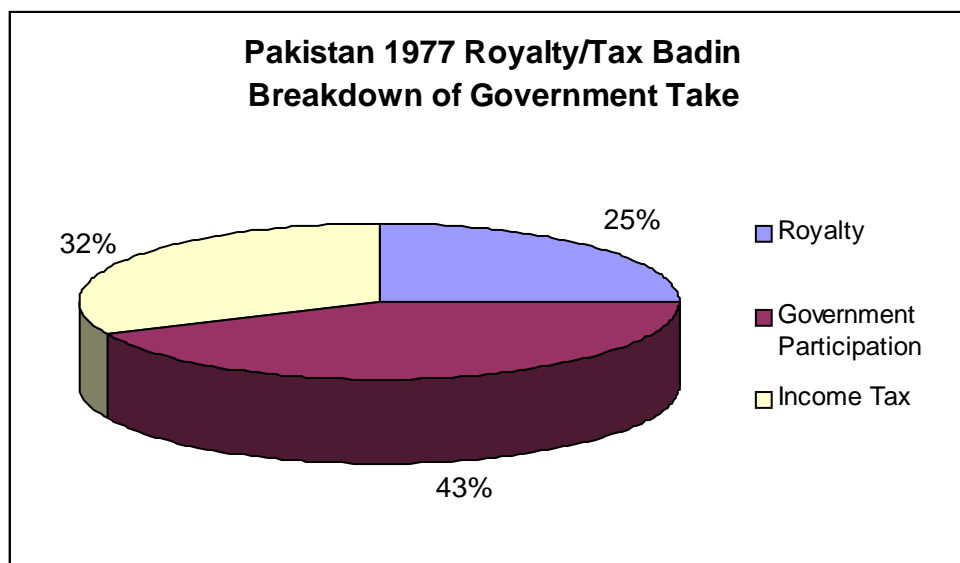
- 1) Royalty – 12.5%
- 2) Government Participation – 40%
- 3) Corporate Income Taxes – 50%

- 1) Royalty of 12.5% is calculated on gross revenues.
- 2) The government is entitled to 40% of profit resource through participation
- 3) Corporate income tax is levied at 50% of the contractors profits remaining after deduction of royalty and cost recovery.

Other Taxes: Production bonuses

Domestic market obligation between 40-45%

Cost Accounting: Ring-fencing applies for all cost recovery purposes, with the exception of dry hole costs.



FLOW DIAGRAM FOR PAKISTAN
1977 – ROYALTY/TAX BADIN

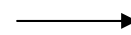
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

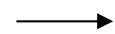
Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

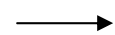
40% Government Participation



\$20.9m

\$31.6m

50% Income tax



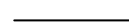
\$15.8m

\$15.8m



\$15.8m

Net income after tax



\$50.8m

Total Contractor Take

Total State Take

\$49.2m

50.8%

% Total Income

49.2%

24.3%

% "Take"

75.7%

Pakistan – 1977 Royalty/Tax Potwar

Contract Type: Royalty Tax System

% Government Take: 72.8%

Core Taxes Used:

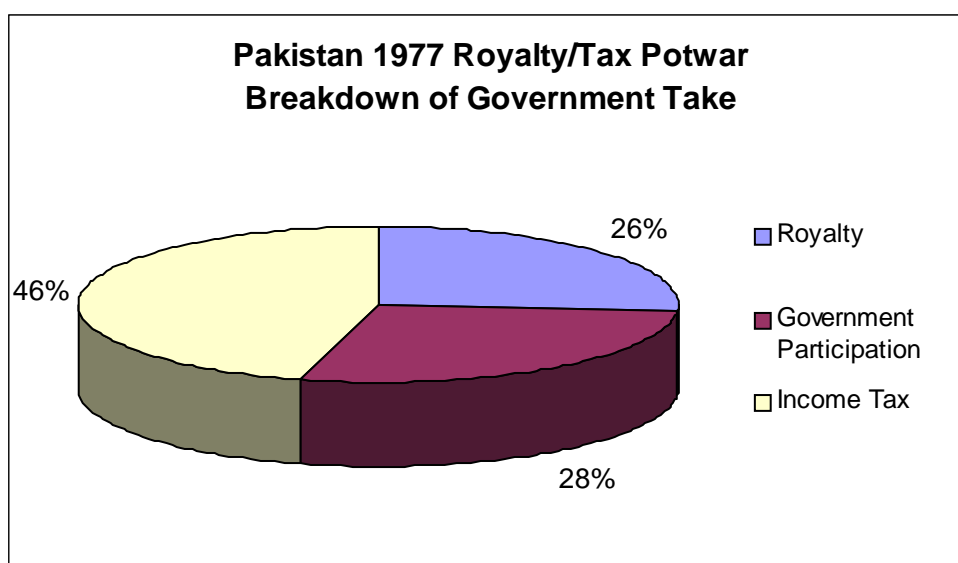
- 1) Royalty – 12.5%
- 2) Government Participation – 25%
- 3) Corporate Income Taxes – 55%

- 1) Royalty of 12.5% is calculated on gross revenues.
- 2) The government is entitled to 25% of profit resource through participation
- 3) Corporate income tax is levied at 55% of the contractors profits remaining after deduction of royalty and cost recovery.

Other Taxes: Production bonuses

Domestic market obligation between 40-45%

Cost Accounting: Ring-fencing applies for all cost recovery purposes, with the exception of dry hole costs.



FLOW DIAGRAM FOR PAKISTAN
1977 – ROYALTY/TAX BADIN

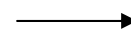
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

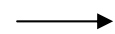
Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

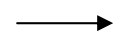
25% Government Participation



\$13.1m

\$39.4m

55% Income tax



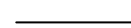
\$21.7m

\$17.7m



\$17.7m

Net income after tax



\$52.7m

Total Contractor Take

Total State Take

\$47.3m

52.7%

% Total Income

47.3%

27.2%

% "Take"

72.8%

Pakistan – 1994 Onshore Royalty/Tax (Zone 1)

Contract Type: Royalty Tax System

% Government Take: 65.7%

Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Government Participation – 15%
- 3) Corporate Income Taxes – 50%

- 1) Royalty of 12.5% is calculated on gross revenues.
- 2) The government is entitled to 5% of profit resource through participation, increasing to 15% upon discovery
- 3) Corporate income tax is levied at 50% of the contractors profits remaining after deduction of royalty and cost recovery.

Other Taxes:

- Production bonuses (including start up)
- Offshore bonus (where applicable)
- Annual training fee
- Social welfare fund

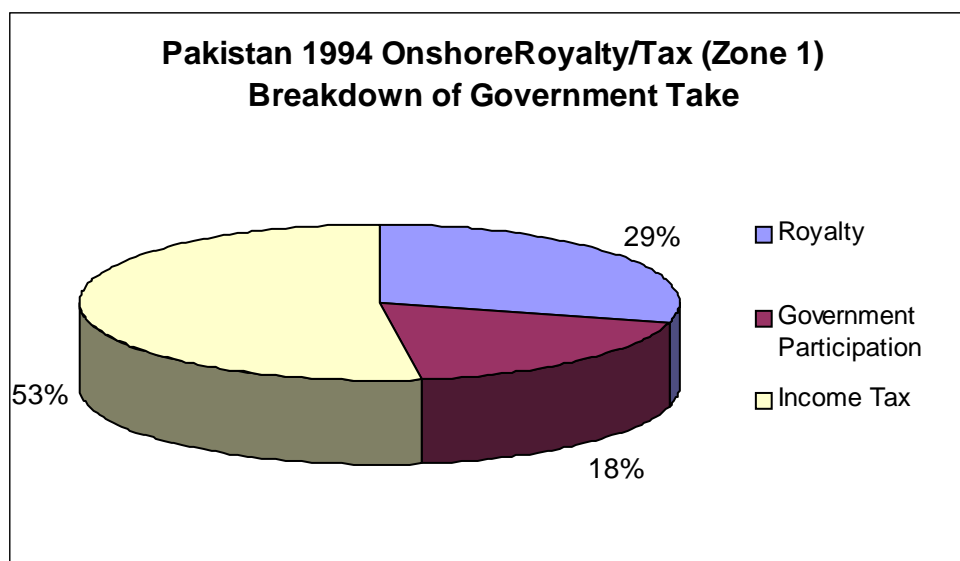
Import duties 3%

Withholding Tax 15%

Cost Accounting: All capital expenditure is depreciated using 10% reducing balance method. Below ground drilling costs are expensed.

Ring-fencing applies for all cost recovery purposes, with the exception of dry hole costs.

Depletion allowance is the lesser of 15% gross or 50% of taxable income.



FLOW DIAGRAM FOR PAKISTAN
1994 – ONSHORE ROYALTY/TAX (ZONE 1)

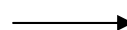
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

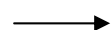
Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

15% Government Participation



\$7.9m

\$44.6m

50% Income tax



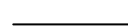
\$22.3m

\$22.3m



\$22.3m

Net income after tax



\$57.3m

Total Contractor Take

Total State Take

\$42.7m

57.3%

% Total Income

42.7%

34.3%

% “Take”

65.7%

Pakistan – 1994 Onshore Royalty/Tax (Zone 2)

Contract Type: Royalty Tax System

% Government Take: 69.4%

Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Government Participation – 20%
- 3) Corporate Income Taxes – 52.5%

- 1) Royalty of 12.5% is calculated on gross revenues.
- 2) The government is entitled to 5% of profit resource through participation, increasing to 20% upon discovery
- 3) Corporate income tax is levied at 52.5% of the contractors profits remaining after deduction of royalty and cost recovery.

Other Taxes:

- Production bonuses (including start up)
- Offshore bonus (where applicable)
- Annual training fee
- Social welfare fund

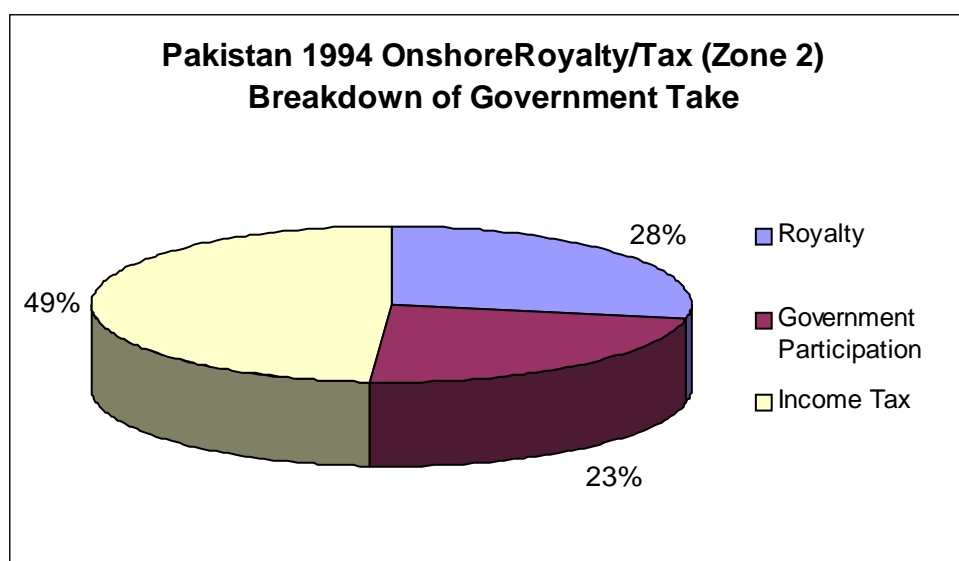
Import duties 3%

Withholding Tax 15%

Cost Accounting: All capital expenditure is depreciated using 10% reducing balance method. Below ground drilling costs are expensed.

Ring-fencing applies for all cost recovery purposes, with the exception of dry hole costs.

Depletion allowance is the lesser of 15% gross or 50% of taxable income



FLOW DIAGRAM FOR PAKISTAN
1994 – ONSHORE ROYALTY/TAX (ZONE 2)

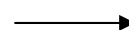
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

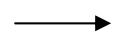
Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

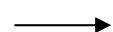
20% Government Participation



\$10.5m

\$42m

52.5% Income tax



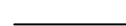
\$22.1m

\$19.9m



\$19.9m

Net income after tax



\$54.9m

Total Contractor Take

Total State Take

\$45.1m

54.9%

% Total Income

45.1%

30.6%

% “Take”

69.4%

Pakistan – 1994 Onshore Royalty/Tax (Zone 3)

Contract Type: Royalty Tax System

% Government Take: 72.8%

Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Government Participation – 25%
- 3) Corporate Income Taxes – 55%

- 1) Royalty of 12.5% is calculated on gross revenues.
- 2) The government is entitled to 5% of profit resource through participation, increasing to 25% upon discovery
- 3) Corporate income tax is levied at 55% of the contractors profits remaining after deduction of royalty and cost recovery.

Other Taxes:

- Production bonuses (including start up)
- Offshore bonus (where applicable)
- Annual training fee
- Social welfare fund

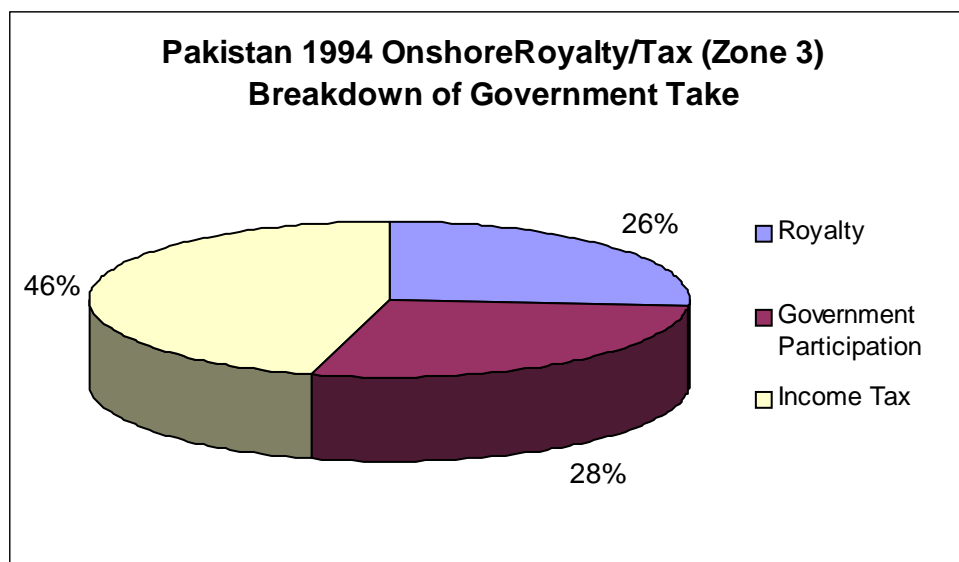
Import duties 3%

Withholding Tax 15%

Cost Accounting: All capital expenditure is depreciated using 10% reducing balance method. Below ground drilling costs are expensed.

Ring-fencing applies for all cost recovery purposes, with the exception of dry hole costs.

Depletion allowance is the lesser of 15% gross or 50% of taxable income.



FLOW DIAGRAM FOR PAKISTAN
1994 – ONSHORE ROYALTY/TAX (ZONE 3)

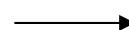
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

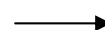
Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

25% Government Participation



\$13.1m

\$39.4m

55% Income tax



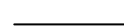
\$21.7m

\$17.7 m



\$17.7m

Net income after tax



\$52.7m

Total Contractor Take

Total State Take

\$47.3m

52.7%

% Total Income

47.3%

27.2%

% "Take"

72.8%

Pakistan – 1994 Offshore Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 80.6%

Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Profit resource share – 60%
- 3) Corporate Income Taxes – 40%

- 1) Royalty is 0% in the first 4 years, rising to 5% in the 5th year, 10% in the 6th year and increasing to 12.5% thereafter.
- 2) After contractors cost recovery and royalty, resources are shared between contractor and government depending on a production based sliding scale. Government share varies between 15-75% for gas and 25-80% for oil
- 3) Corporate income tax is levied at 40% of the contractors profits remaining after deduction of royalty and cost recovery.

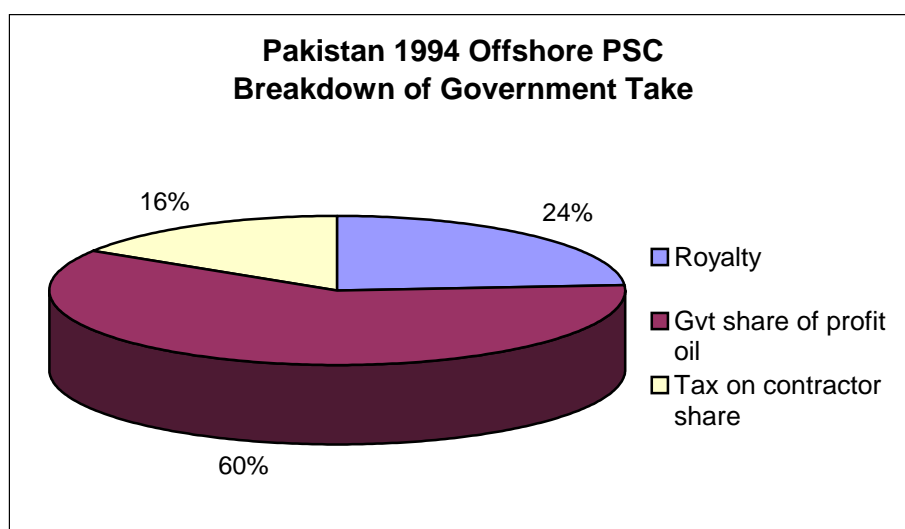
Other Taxes: Production bonuses (including start up)
Offshore bonus
Annual training fee
Social welfare fund

Import duties 3%
Withholding Tax 15%
Cost recovery is limited to 85%

Cost Accounting: Development costs are depreciated using 20% reducing balance method. Exploration and intangible costs are depreciated using a straight line method over 4 years.

Ring-fencing applies for all cost recovery purposes, with the exception of dry hole costs.

Depletion allowance is the lesser of 15% gross or 50% of taxable income.



Based on Gross Income of \$100m		
<u>Contractor Share</u>		<u>State Take</u>
	GROSS INCOME \$100m	
	<u>12.5% Royalty</u> →	\$12.5m
	\$87.5m	
\$35m ←	Deductions for <u>Allowable Costs (assumed)</u>	
	\$52.5m	
	<u>60% Profit resource share</u> →	\$31.5m
	\$21m	
	<u>40% Income tax</u> →	\$8.4m
	\$12.6 m	
<u>\$12.6m</u> ←	Net income after tax	_____
<u>\$47.6m</u>	Total Contractor Take	
	Total State Take	<u>\$52.4m</u>
47.6%	% Total Income	52.4%
19.4%	% “Take”	80.6%

329

Qatar – 1985 Sohio Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 85%

Core Taxes Used: 1) Profit resource share – 85%

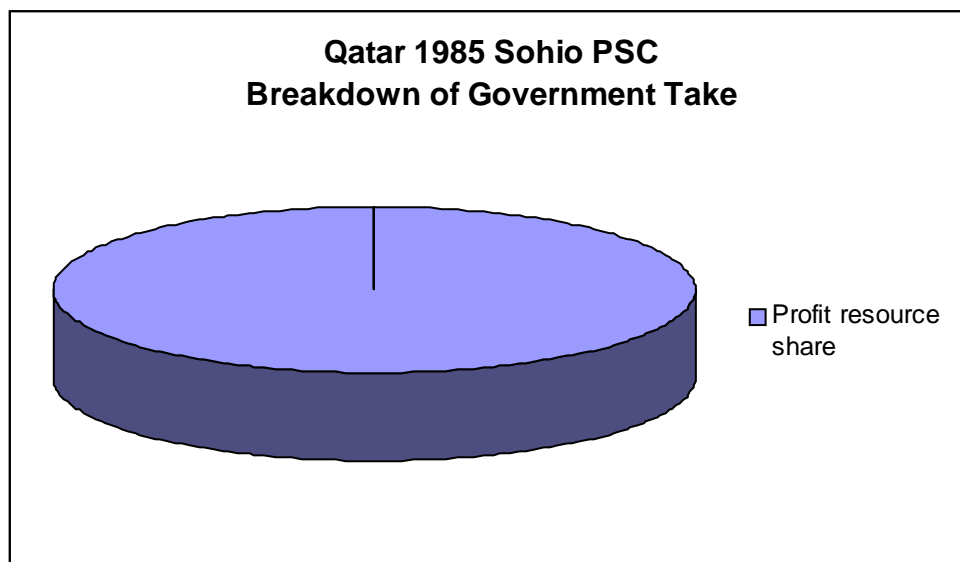
- 1) After contractors cost recovery, resources are shared between contractor and government depending on a production based sliding scale. Government share varies between 80-90%

Other Taxes: Production bonuses.

Cost Accounting: All costs are depreciated using a straight line method over a period of 5 years.

Ring-fencing applies for cost recovery purposes.

Cost recovery limited to 30%. Excess cost recovery crude split 90/10% in favour of the government.



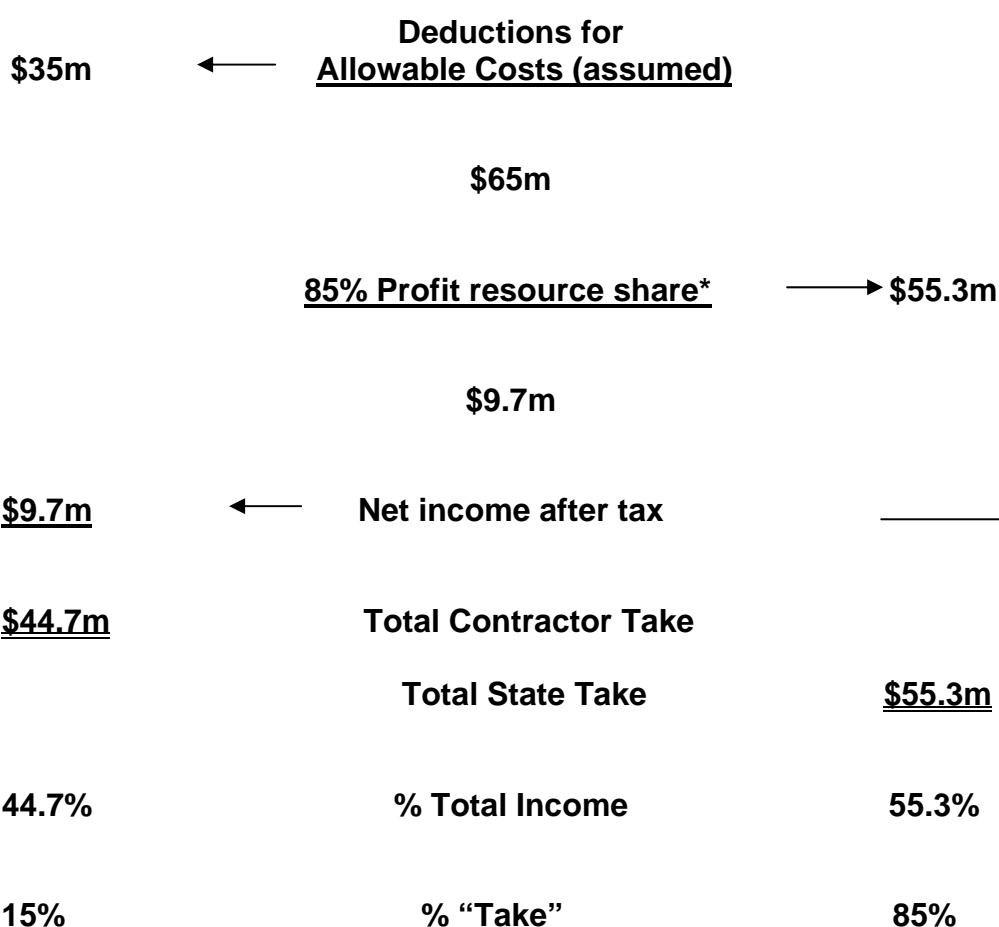
FLOW DIAGRAM FOR QATAR
1985 – SOHIO PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m



** = Profit resource share varies between 80-90% depending on production*

Qatar – 1992 Restated Development PSA Total

Contract Type: Production Sharing Contract

% Government Take: 94.2%

Core Taxes Used: 1) Government Participation – 65%
2) Profit resource share – 83.5%

- 1) The government is entitled to 65% of profit resource through participation
- 2) Resources are shared between contractor and government depending on a production based sliding scale. Government share varies between 35-90%

Other Taxes: Production bonuses

Cost Accounting: Ring-fencing applies for cost recovery purposes

Cost recovery is limited to 65% for the first 7 years, then reduced to 25% thereafter. Excess cost recovery resource is split 65/35% in favour of the government.

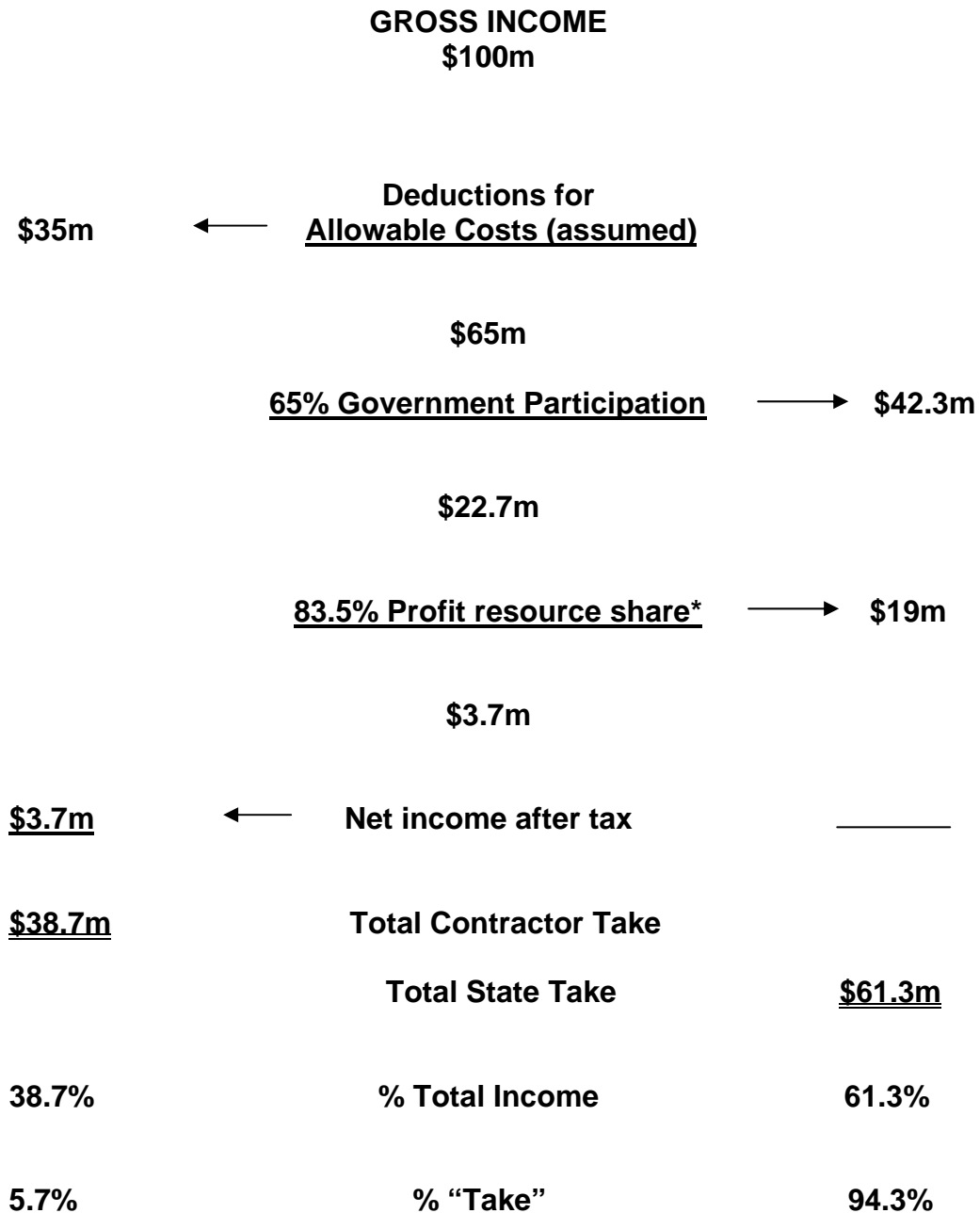


FLOW DIAGRAM FOR QATAR 1992
RESTATED DEVELOPMENT PSA TOTAL

Based on Gross Income of \$100m

Contractor Share

State Take



* = Profit resource share varies between 35-90% depending on production

Qatar – 1994 Model Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 75%

Core Taxes Used: 1) Profit resource share– 75%

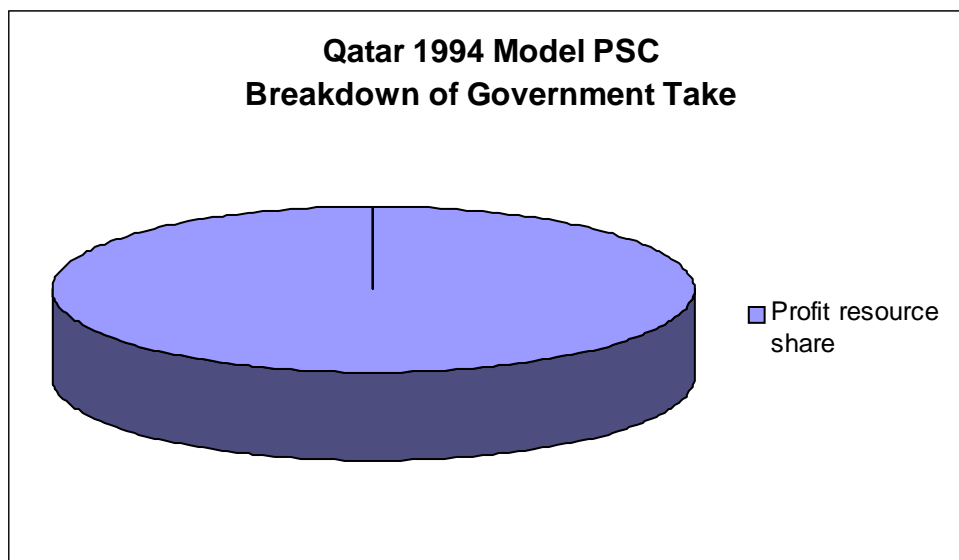
- 1) Resources are shared between contractor and government depending on a sliding scale based on R factor. Government share varies between 55-85%.

Other Taxes: Various bonuses.

Cost Accounting: All costs are depreciated using a straight line method over a period of 4 years.

Ring-fencing applies for cost recovery purposes.

Cost recovery is limited to 40%.



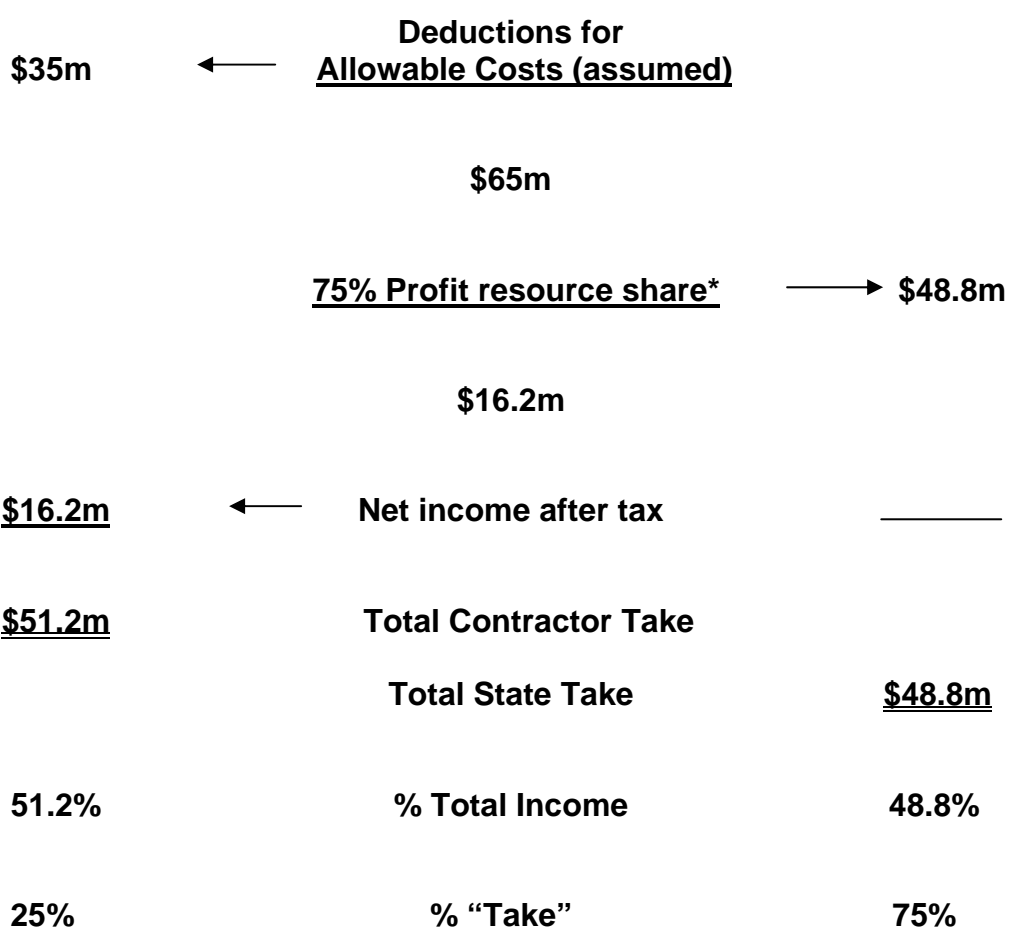
FLOW DIAGRAM FOR QATAR
1994 MODEL PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m



** = Profit resource share varies between 55-80% depending on production*

Qatar – ARCO

Contract Type: Production Sharing Contract

% Government Take: 81%

Core Taxes Used: 1) Profit resource share– 81%

- 1) Resources are shared between contractor and government depending on a sliding scale based on R factor. Government share varies between 76-86%.

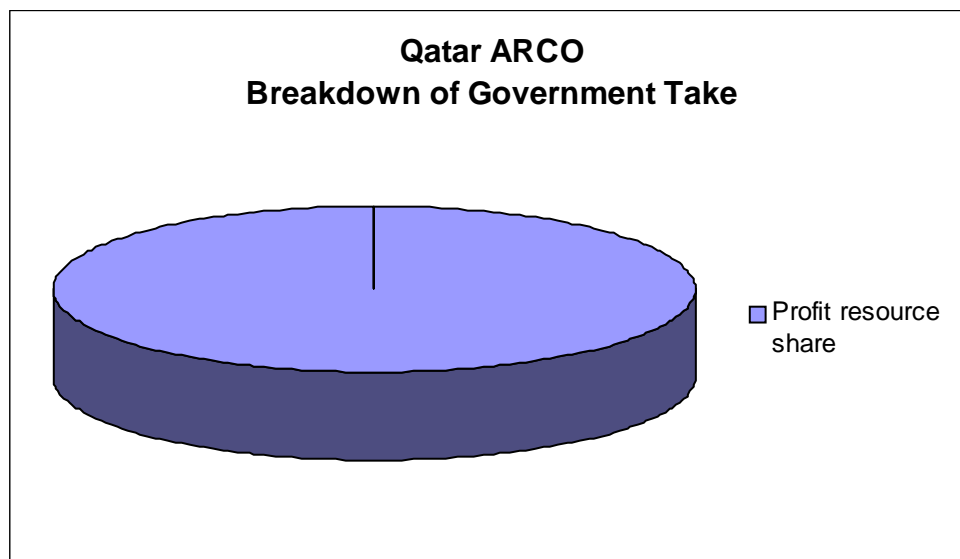
Other Taxes: Signature bonus
Production bonuses (including start up)
Rental

Overhead of 2% on exploration and development expenditure.

Cost Accounting: All costs are depreciated using a straight line method over a period of 4 years.

Ring-fencing applies for cost recovery purposes.

Cost recovery is limited to 40%. Excess cost recovery resource is split 90/10% in favour of the government.



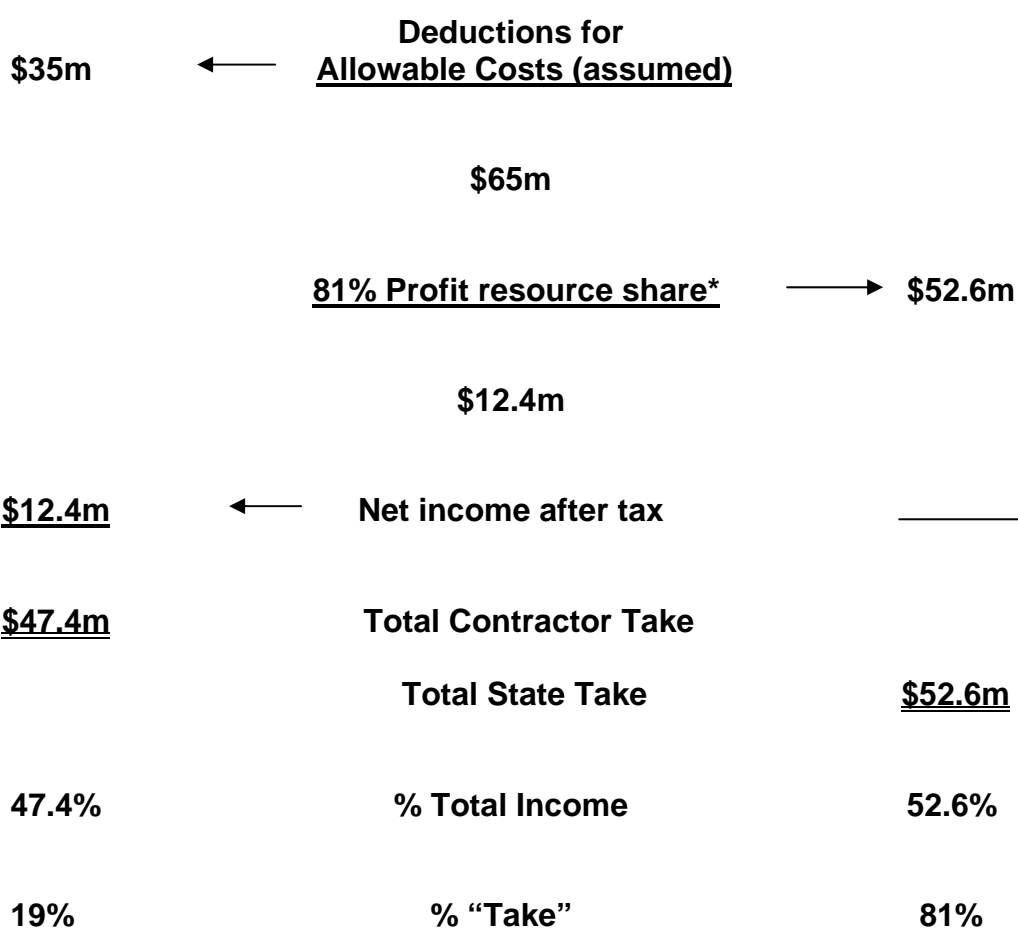
FLOW DIAGRAM FOR QATAR ARCO

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m



* = Profit resource share varies between 76-86% depending on production

Romania – 1993 Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 75%

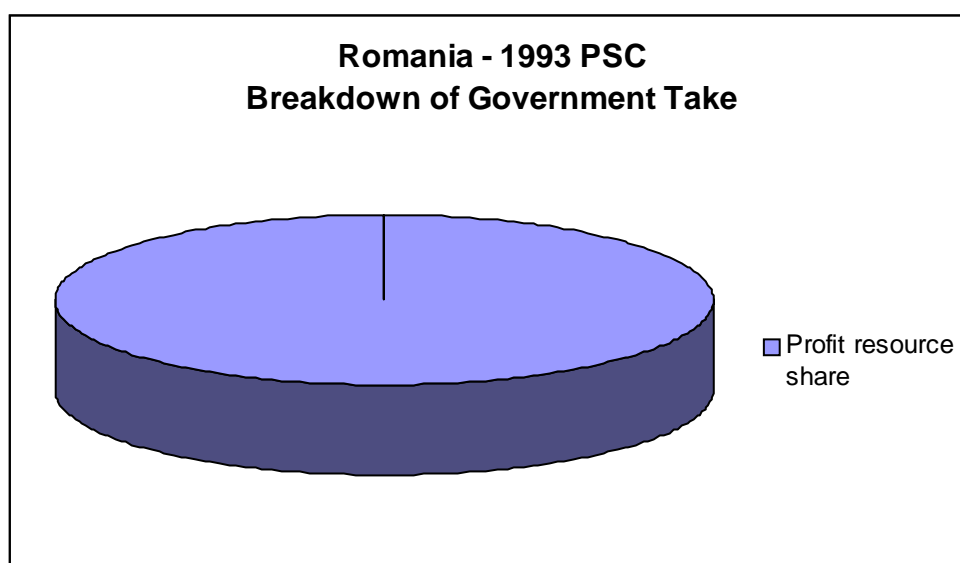
Core Taxes Used: 1) Profit resource share – 75%

- 1) After contractors cost recovery, resources are split 75/25% in favour of the government.

Other Taxes: Rentals/fees for farmland and forestland used for drilling, and deforestation.

Domestic market obligation; government has the right of the first refusal of the resource.

Cost Accounting: Ring fencing applies for cost recovery around the contract area.



FLOW DIAGRAM FOR ROMANIA
1993 PRODUCTION SHARING CONTRACT

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ←
Deductions for
Allowable Costs (assumed)
→

\$65m

75% Profit Resource Share
→
\$48.8m

\$16.2m

\$16.2m ←
Net income after tax
→

\$51.2m
Total Contractor Take

Total State Take
\$48.8m

51.2%
% Total Income
48.8%

25%
% "Take"
75%

Romania – 1996 Royalty/Tax

Contract Type: Production Sharing Contract

% Government Take: 60.8%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Government participation – 25%
- 3) Income Tax - 38%

- 1) Royalty is made up of two components, 3% fixed Exploitation Tax, and a negotiable sliding scale based on trances of R factor (varies between 3-9%).
- 2) The government is entitled to 25% of profit resource through participation. This figure is negotiable.
- 3) Income tax is calculated as 38% of the contractors resource. There is a one-year payment holiday in the first year.

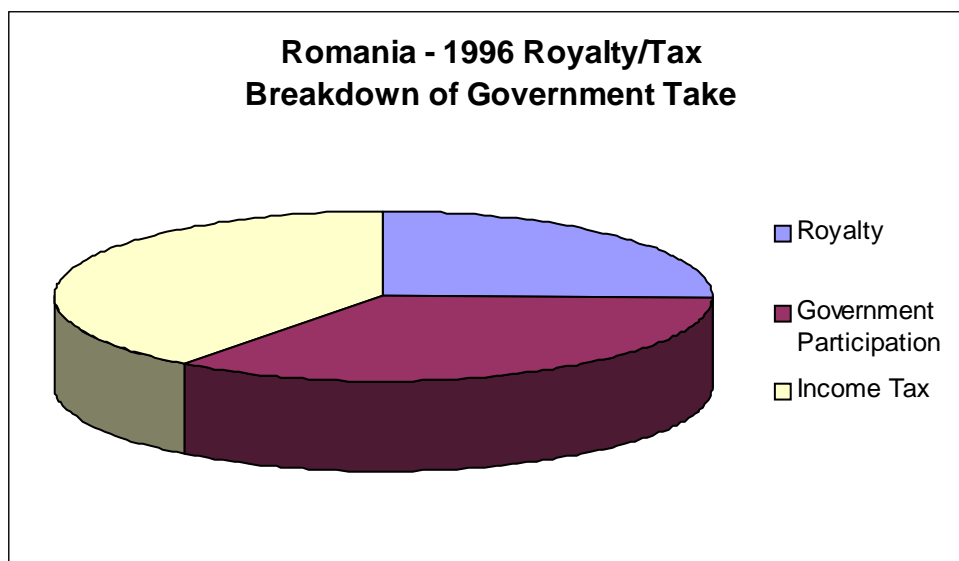
Other Taxes: Training fees and rentals negotiable.

Domestic market obligation; government has the right of the first refusal of the resource.

Withholding tax 10%.

Cost Accounting: Depreciation of capital expenditure is calculated using a straight line method over 5 years.

Ring fencing applies for cost recovery purposes.



FLOW DIAGRAM FOR ROMANIA
1993 PRODUCTION SHARING CONTRACT

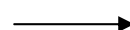
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10% Royalty



\$10m

\$90m

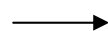
Deductions for
Allowable Costs (assumed)



\$35m

\$55m

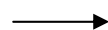
25% Profit Resource Share



\$13.8m

\$41.2m

38% Income Tax



\$15.7m

\$25.5m



\$25.5m

Net income after tax



\$60.5m

Total Contractor Take

Total State Take

\$39.5m

60.5%

% Total Income

39.5%

39.2%

% "Take"

60.8%

South Africa– 1994 Royalty/Tax Model

Contract Type: Royalty Tax System

% Government Take: 65.8%

Core Taxes Used:

- 1) Royalty – 4%
- 2) Government participation – 20%
- 3) Corporate Income Taxes – 35%
- 4) Surtaxes – 30%

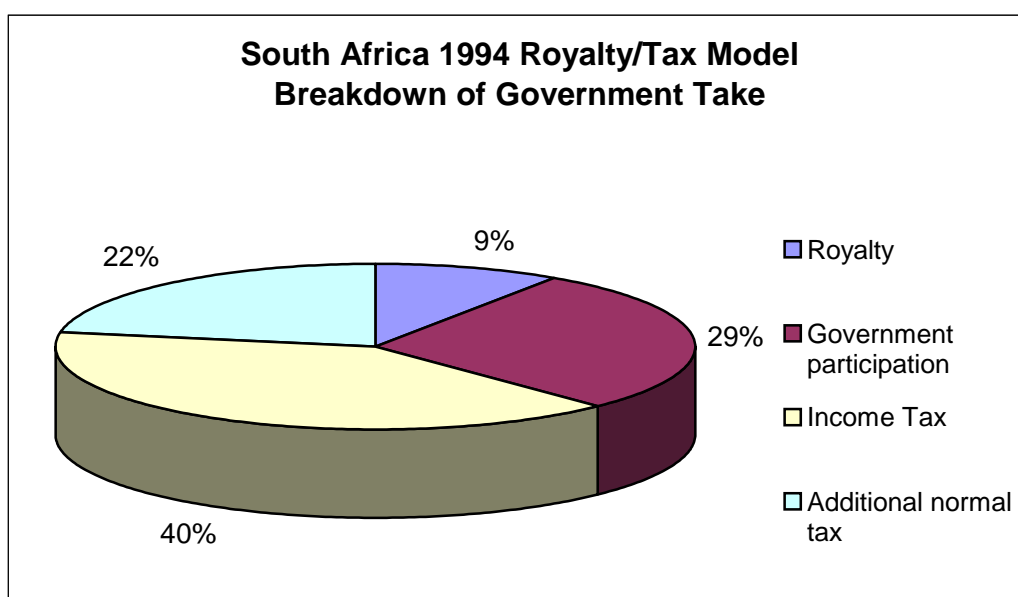
- 1) Royalty is calculated on gross revenues using a sliding scale based on production. Royalty varies between 2-5%.
- 2) The government is entitled to 20% of profit resource through participation.
- 3) Corporate income tax is levied at a rate of 35% of contractor profits after deduction of royalty and cost recovery.
- 4) Additional normal tax (ANT) calculated using an R factor sliding scale (20-40%). ANT was abolished in the 1997 model.

Other Taxes: Rentals \$250/year during exploration phase and \$1million/year during production (adjusted for inflation).

Possible domestic market obligation on a pro rate basis.

Cost Accounting: All costs are expensed.

12% allowance compounded on unredeemed capital expenditure.



FLOW DIAGRAM FOR SOUTH AFRICA
1994 – ROYALTY/TAX MODEL

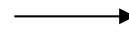
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

4% Royalty



\$4m

\$96m

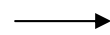
Deductions for
Allowable Costs (assumed)



\$35m

\$61m

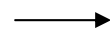
20% Government Participation



\$12.2m

\$48.8m

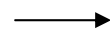
35% Income tax



\$17.1m

\$31.7m

30% ANT Surtax*



\$9.5m

\$22.2m



\$22.2m

Net income after tax



\$57.2m

Total Contractor Take

Total State Take

\$42.8m

57.2%

% Total Income

42.8%

34.2%

% "Take"

65.8%

* = Additional Normal Tax varies between 20-40% based on R factor

Syria – 1985 Pecten

Contract Type: Production Sharing Contract

% Government Take: 84.6%

Core Taxes Used: 1) Royalty – 12.5%
2) Profit resource share – 81%

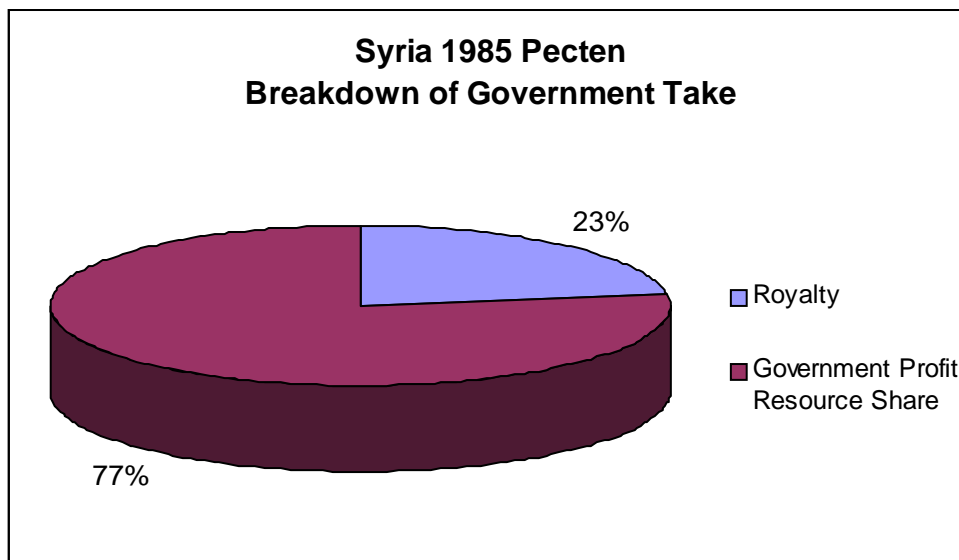
- 1) Royalty of 12.5% is calculated on gross revenues.
- 2) After royalty payment and contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 79-85%.

Other Taxes: Signature bonuses
Production bonuses

Cost Accounting: Development costs are depreciated using a straight line method over 5 years. Capital exploration and operating costs are expensed.

Ring-fencing applies by contract.

Cost recovery limited to 25% of unused or excess cost oil goes directly to the government.



FLOW DIAGRAM FOR SYRIA
1985 PECTEN

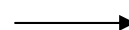
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

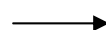
Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

81% Government Resource Share*



\$42.5m

\$10m

\$10m



Net income after tax



\$45m

Total Contractor Take

Total State Take

\$55m

45%

% Total Income

55%

15.4%

% "Take"

84.6%

**= Government resource profit share ranges between 79-85%*

Syria – 1988 Elf

Contract Type: Production Sharing Contract

% Government Take: 89.8%

Core Taxes Used: 1) Royalty – 12.5%
2) Profit resource share – 87.5%

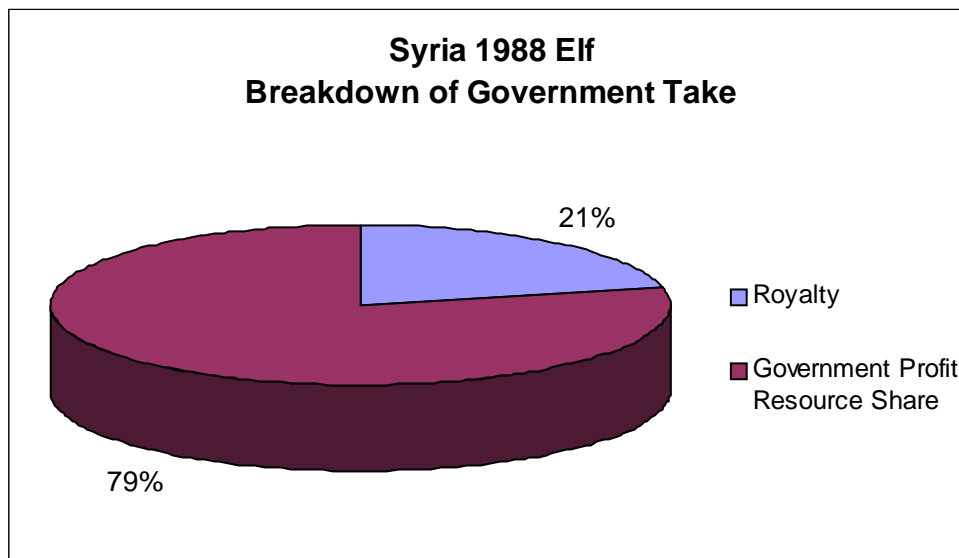
- 1) Royalty of 12.5% is calculated on gross revenues.
- 2) After royalty payment and contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 81-87.5%.

Other Taxes: Signature bonuses
Production bonuses

Cost Accounting: Development costs are depreciated using a straight line method over 5 years. Capital exploration and operating costs are expensed.

Ring-fencing applies by contract.

Cost recovery limited to between 24-25% depending on production levels.



FLOW DIAGRAM FOR SYRIA
1988 ELF

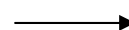
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

87.5% Government Resource Share*

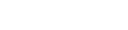


\$45.9m

\$6.6m



Net income after tax



\$6.6m

\$41.6m

Total Contractor Take

Total State Take

\$58.4m

41.6%

% Total Income

58.4%

10.2%

% "Take"

89.8%

** = Government resource profit share ranges between 81-87.5%*

Syria – 1988 Oxy

Contract Type: Production Sharing Contract

% Government Take: 84.6%

Core Taxes Used: 1) Royalty – 12.5%
2) Profit resource share – 81%

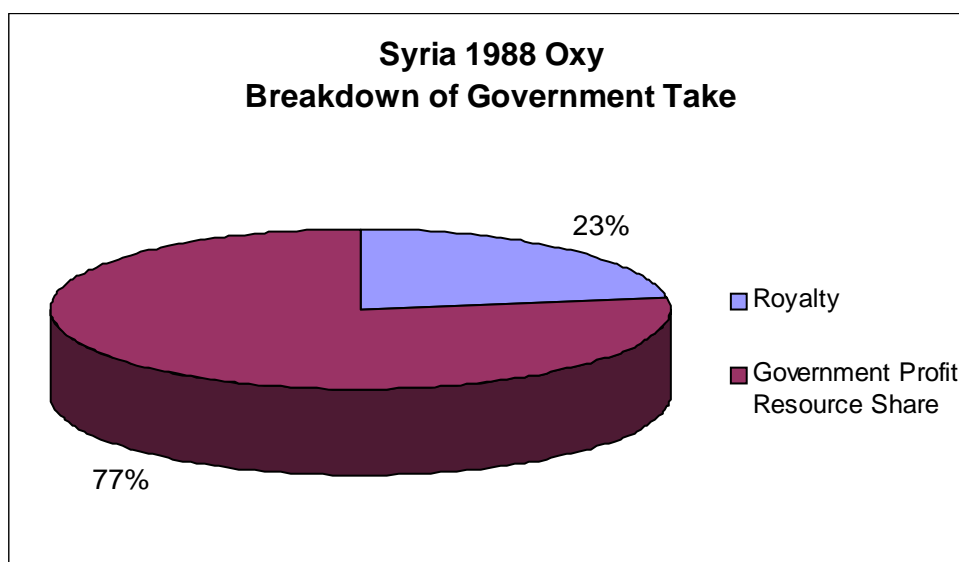
- 1) Royalty of 12.5% is calculated on gross revenues.
- 2) After royalty payment and contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 75-87.5%.

Other Taxes: Signature bonuses
Production bonuses

Cost Accounting: Development costs are depreciated using a straight line method over 5 years. Capital exploration and operating costs are expensed.

Ring-fencing applies by contract.

Cost recovery limited to 23-30% depending on production levels.



FLOW DIAGRAM FOR SYRIA
1988 OXY

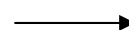
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

81% Government Resource Share*



\$42.5m

\$10m

\$10m



Net income after tax

\$45m

Total Contractor Take

Total State Take

\$55m

45%

% Total Income

55%

15.4%

% "Take"

84.6%

**= Government resource profit share ranges between 75-87.5%*

Syria – 1992 Unocal Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 88.8%

Core Taxes Used: 1) Royalty – 16%
2) Profit resource share – 85%

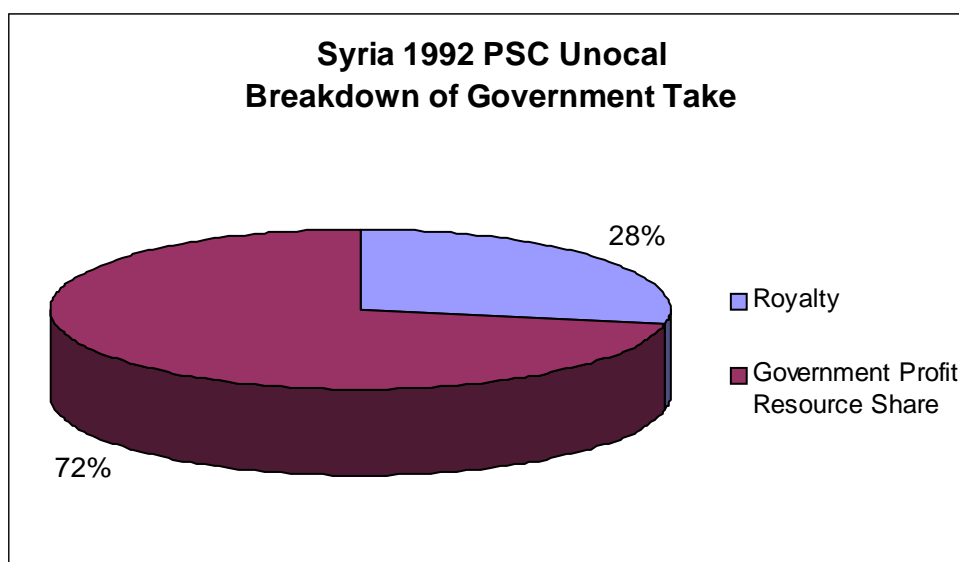
- 1) Royalty is calculated on gross revenues using a sliding scale based on production. Royalty varies between 14-16%.
- 2) After royalty payment and contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 80.5-88%.

Other Taxes: Signature bonuses
Production bonuses
Training fee (recoverable)

Cost Accounting: Development costs are depreciated using a straight line method over 5 years. Capital exploration and operating costs are expensed.

Ring-fencing applies by contract.

Cost recovery limited to 20-25% (net of royalty) depending on production levels.



FLOW DIAGRAM FOR SYRIA
1992 UNOCAL

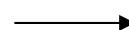
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

16% Royalty



\$16m

\$84m

Deductions for
Allowable Costs (assumed)



\$35m

\$49m

85% Government Resource Share*



\$41.7m

\$7.3m

\$7.3m



Net income after tax



\$42.3m

Total Contractor Take

Total State Take

\$57.7m

42.3%

% Total Income

57.7%

11.2%

% "Take"

88.8%

**= Government resource profit share ranges between 80.5-88%*

Syria – 1994 Model Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 86.6%

Core Taxes Used: 1) Royalty – 15%
2) Profit resource share – 82.5%

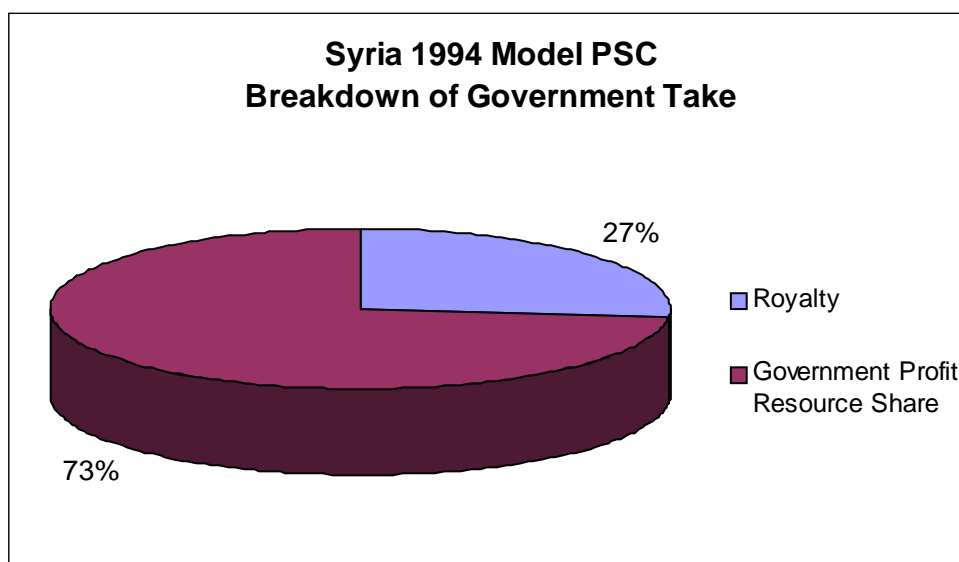
- 1) Royalty is calculated on gross revenues using a sliding scale based on production. Royalty varies between 13-15%.
- 2) After royalty payment and contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 79-87.5%.

Other Taxes: Signature bonuses
Production bonuses
Training fee (recoverable)

Cost Accounting: Development costs are depreciated using a straight line method over 5 years. Capital exploration and operating costs are expensed.

Ring-fencing applies by contract.

Cost recovery limited to 20-29% (net of royalty) depending on production levels.



FLOW DIAGRAM FOR SYRIA
1994 MODEL PSC

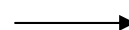
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

15% Royalty



\$15m

\$85m

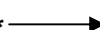
Deductions for
Allowable Costs (assumed)



\$35m

\$50m

82.5% Government Resource Share*



\$41.3m

\$8.7m

\$8.7m



Net income after tax



\$43.7m

Total Contractor Take

Total State Take

\$56.3m

43.7%

% Total Income

56.3%

13.4%

% "Take"

86.6%

**= Government resource profit share ranges between 79-87.5%*

Syria – Transglobal Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 83.8%

Core Taxes Used: 1) Royalty – 12.5%
2) Profit resource share – 80%

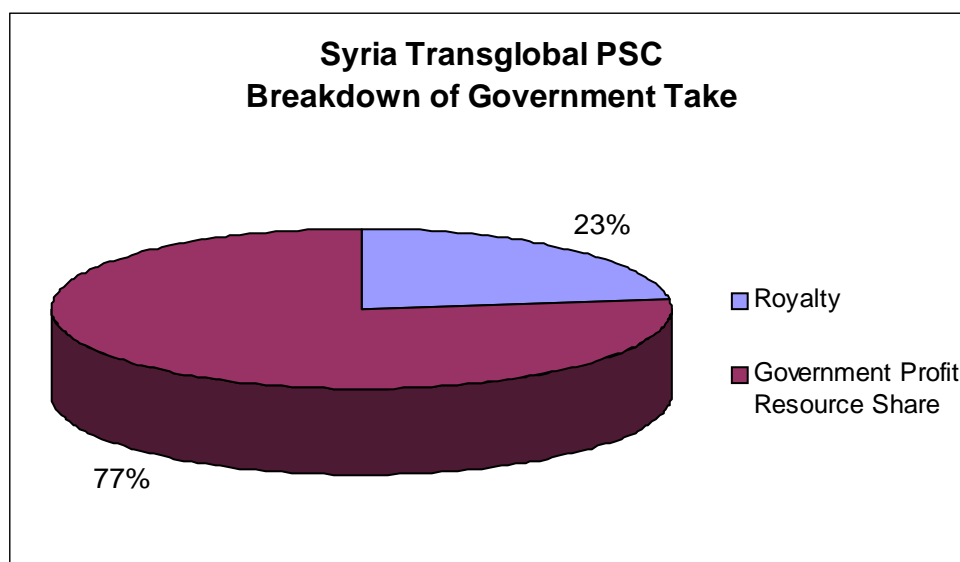
- 1) Royalty is calculated as 12.5% on gross revenues.
- 2) After royalty payment and contractors cost recovery, resources are split 80%/20% in favour of the government.

Other Taxes: Signature bonuses

Cost Accounting: Development costs are depreciated using a straight line method over 5 years. Capital exploration and operating costs are expensed.

Ring-fencing applies by contract.

Cost recovery limited to 33% net of royalty.



FLOW DIAGRAM FOR SYRIA
1994 TRANSGLOBAL PSC

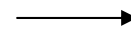
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

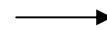
Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

80% Government Resource Share



\$42m

\$10.5m

\$10.5m



Net income after tax



\$45.5m

Total Contractor Take

Total State Take

\$54.5m

45.5%

% Total Income

54.5%

16.2%

% "Take"

83.8%

Thailand –Royalty/Tax Unocal 2 PITA III

Contract Type: Royalty Tax System

% Government Take: 58%

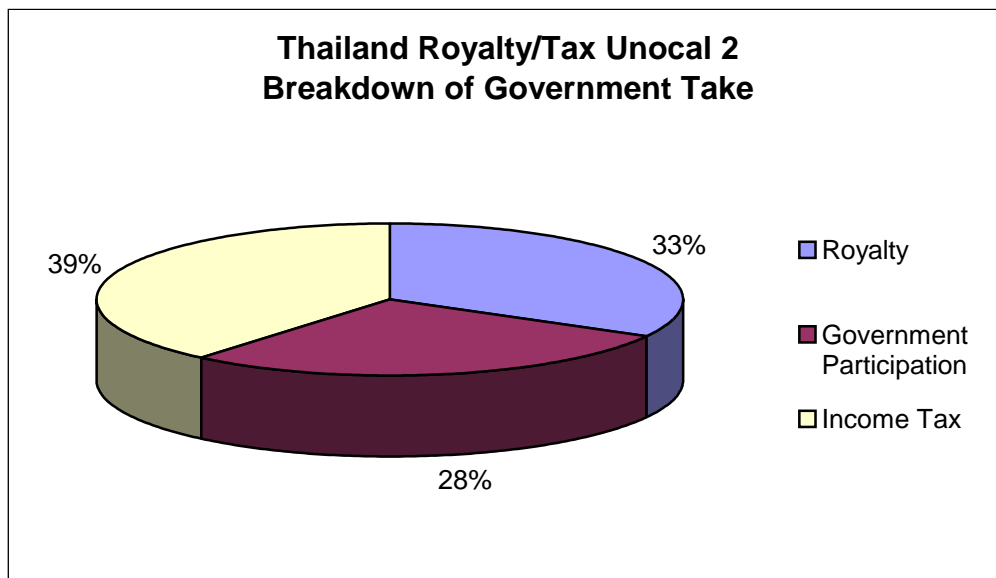
Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Government participation - 20%
- 3) Corporate Income Taxes – 35%

- 1) Royalty of 12.5% is calculated on gross revenues (8.75% for deepwater fields).
- 2) The government is entitled to between 20%-50% of profit resource through participation (20% assumed).
- 3) Corporate income tax is levied at a rate of 35% the contractors profits.

Other Taxes: Remittance tax on pre-tax profits of 15%. 50% of royalty creditable against remittance tax.

Cost Accounting: Capital expenditure is depreciated using a straight line method over 5 years.



**FLOW DIAGRAM FOR THAILAND
ROYALTY/TAX UNOCAL 2 PITA III**

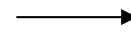
Based on Gross Income of \$100m

Contractor Share

State Take

**GROSS INCOME
\$100m**

12.5% Royalty



\$12.5m

\$87.5m

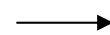
**Deductions for
Allowable Costs (assumed)**

\$35m



\$52.5m

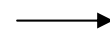
20% Government Participation*



\$10.5m

\$42m

35% Income tax



\$14.7m

\$27.3m

\$27.3m



Net income after tax



\$62.3m

Total Contractor Take

Total State Take

\$37.7m

62.3%

% Total Income

37.7%

42%

% "Take"

58%

**=Government participation varies between 20-50%*

Thailand –1972-1982 Thai I

Contract Type: Royalty Tax System

% Government Take: 69.7%

Core Taxes Used:

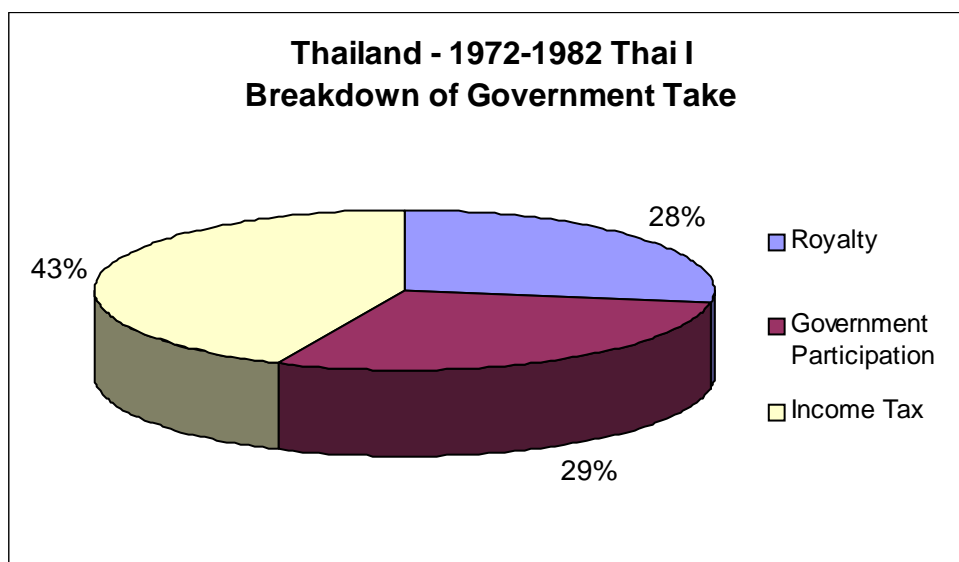
- 1) Royalty – 12.5%
- 2) Government participation - 25%
- 3) Corporate Income Taxes – 50%

- 1) Royalty of 12.5% is calculated on gross revenues
- 2) The government is entitled to 25% of profit resource through participation
- 3) Corporate income tax is levied at a rate of 50% the contractors profits.

Other Taxes: Remittance tax on pre-tax profits 15%..

Cost Accounting: Capital expenditure is depreciated using a straight line method over 5 years.

Royalty on domestic consumption creditable against income tax



FLOW DIAGRAM FOR THAILAND
1972-1982 THAI I

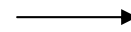
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

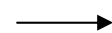
Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

25% Government Participation



\$13.1m

\$39.4m

50% Income tax



\$19.7m

\$19.7m



\$19.7m

Net income after tax



\$54.7m

Total Contractor Take

Total State Take

\$45.3m

54.7%

% Total Income

45.3%

30.3%

% "Take"

69.7%

Thailand –1982-1989 Thai II

Contract Type: Royalty Tax System

% Government Take: 69.7%

Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Government participation - 25%
- 3) Corporate Income Taxes – 50%

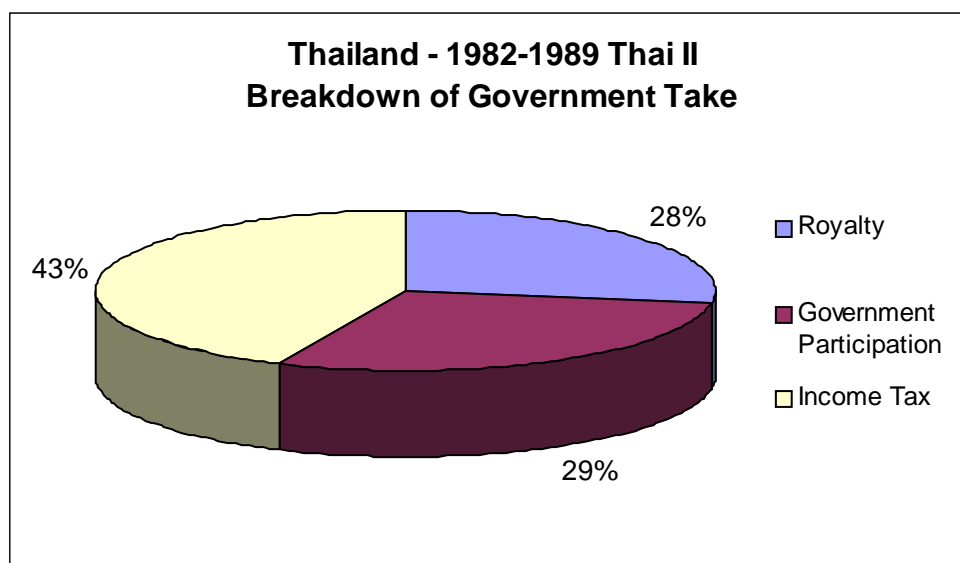
- 1) Royalty is calculated on gross revenues using a sliding scale based on production. Royalty varies between 12.5-56%, only introducing the higher rates for very large production (stepped system)
- 2) The government is entitled to 25% of profit resource through participation
- 3) Corporate income tax is levied at a rate of 50% the contractors profits.

Other Taxes: Remittance tax on pre-tax profits 15%.

Annual benefit tax which essentially is a excess cost penalty; calculated on excess costs over 20% of gross revenues

Cost Accounting: Capital expenditure is depreciated using a straight line method over 5 years.

Royalty on domestic consumption creditable against income tax.



FLOW DIAGRAM FOR THAILAND
1982-1989 THAI II

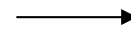
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

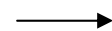
Deductions for
Allowable Costs (assumed)



\$35m

\$52.5m

25% Government Participation*



\$13.1m

\$39.4m

50% Income tax



\$19.7m

\$19.7m



\$19.7m

Net income after tax



\$54.7m

Total Contractor Take

Total State Take

\$45.3m

54.7%

% Total Income

45.3%

30.3%

% "Take"

69.7%

Thailand –1989+ Thai III

Contract Type: Royalty Tax System

% Government Take: 75.7%

Core Taxes Used:

- 1) Royalty – 12.5%
- 2) Government participation - 25%
- 3) Corporate Income Taxes – 50%
- 4) Surtax – 20%

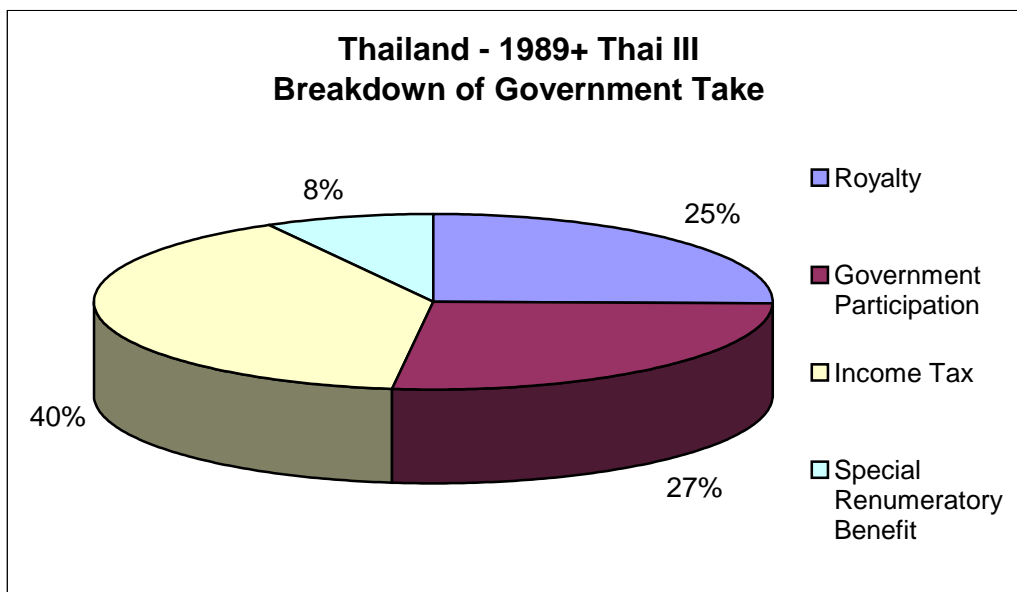
- 1) Royalty is calculated on gross revenues using a sliding scale based on production. Royalty varies between 5-15% (3.5-10.5% in deep water)
- 2) The government is entitled to 25% of profit resource through participation
- 3) Corporate income tax is levied at a rate of 50% the contractors profits.
- 4) "Special remunerator benefit" based on the annual petroleum profit divided by the cumulative depth (in meter) of all the wells drilled. It varies between 0-75%, however an uplift is allowable on tangible development costs. Effective rate is assumed to range from 15-30%.

Other Taxes: Remittance tax on pre-tax profits 15%.

Cost Accounting: Capital expenditure is depreciated using a straight line method over 5 years.

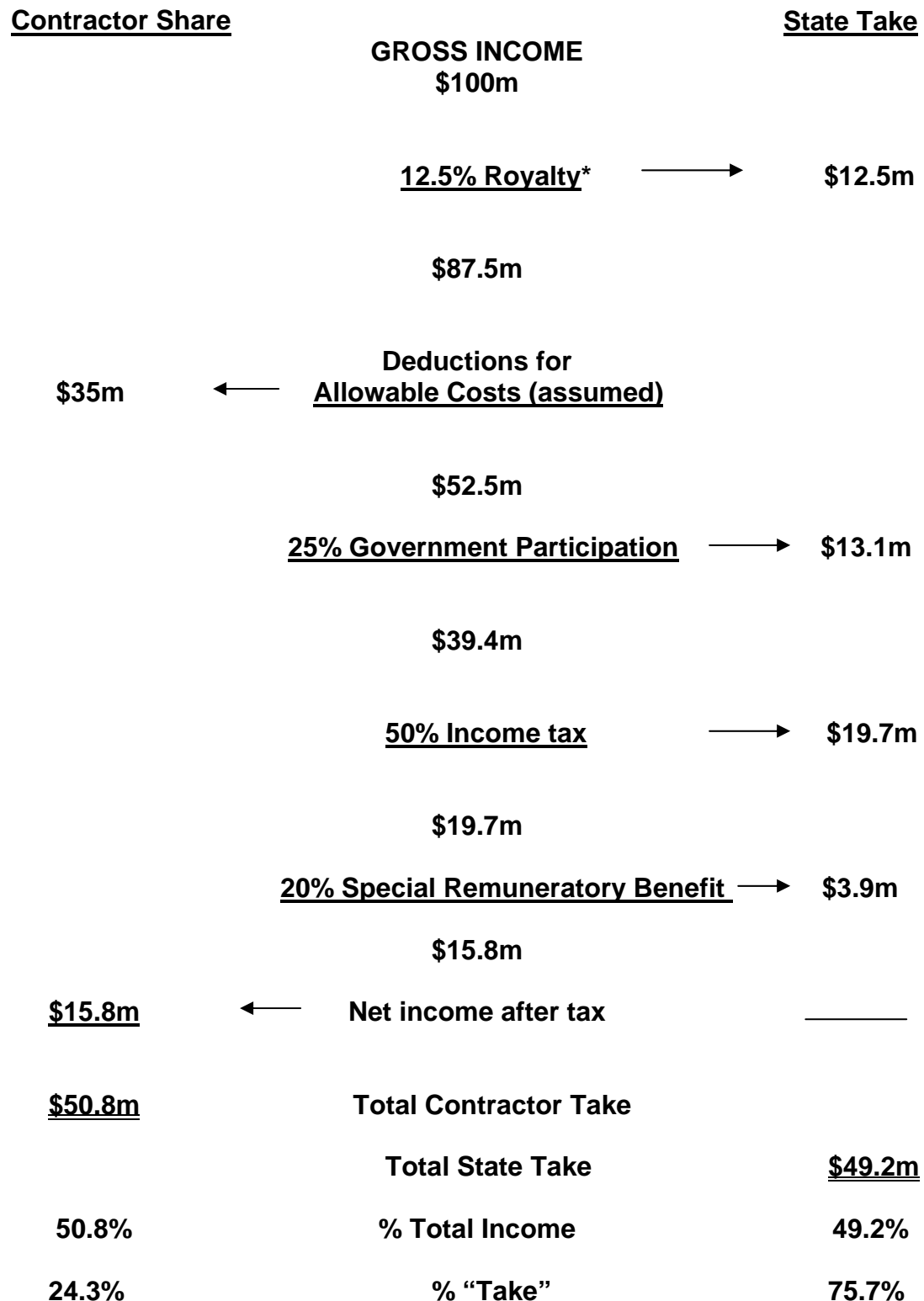
Cost ring fencing applies by contract

Royalty on domestic consumption creditable against income tax.



FLOW DIAGRAM FOR THAILAND
1989+ THAI III

Based on Gross Income of \$100m



*= Royalty varies between 5-15% depending on production

Turkey – 1990s Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 45.4%

Core Taxes Used:

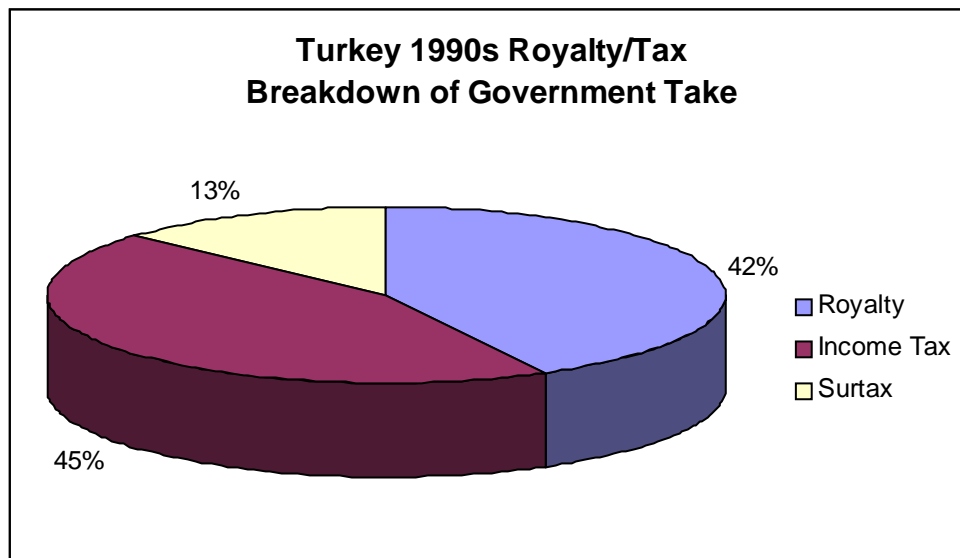
- 1) Royalty – 12.5%
- 2) Corporate Income Taxes – 25%
- 3) Surtaxes – 10%

- 1) Royalty of 12.5% calculated on gross revenues.
 - 2) Corporate income tax is levied at a rate of 25% profits remaining after deduction of royalty and cost recovery.
 - 3) Surtax ranges between 7-10%, and is calculated a
- * Total taxes (and royalties) are limited to 55% of profit

Other Taxes: Withholding tax 20%

Cost Accounting: Capital expenditure is depreciated using a straight line method over 5 years.

Ring-fencing occurs upstream for tax purposes.



FLOW DIAGRAM FOR TURKEY
1990s– ROYALTY/TAX

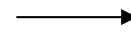
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

12.5% Royalty



\$12.5m

\$87.5m

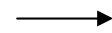
Deductions for
Allowable Costs (assumed)

\$35m



\$52.5m

25% Income tax



\$13.1m

\$39.4m

10% Surtax tax



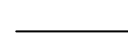
\$3.9m

\$35.5m

\$35.5m



Net income after tax



\$70.5m

Total Contractor Take

Total State Take

\$29.5m

70.5%

% Total Income

29.5%

54.6%

% “Take”

45.4%

Turkmenistan – 1993 Joint Enterprise Contracts

Contract Type: Production Sharing Contract

% Government Take: 83.8%

Core Taxes Used:

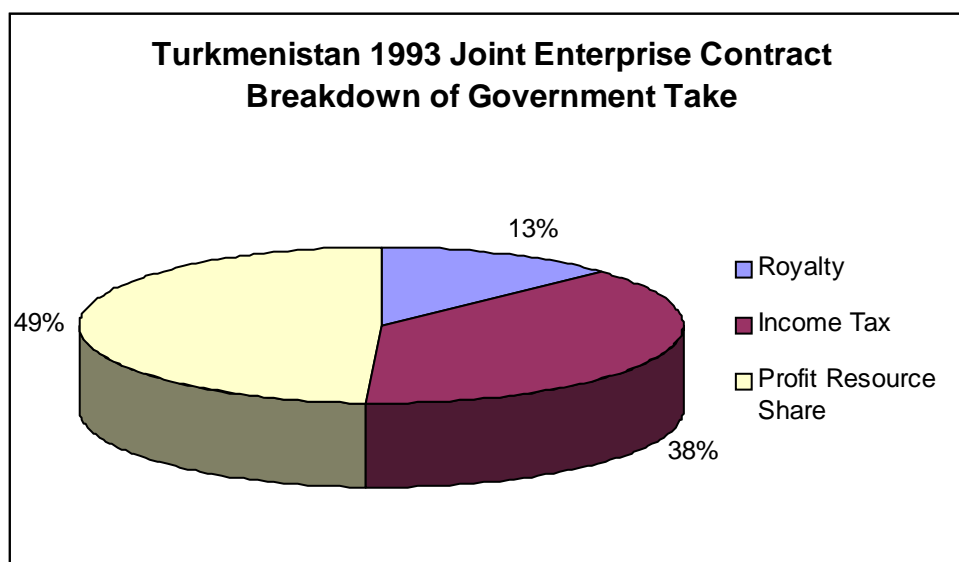
- 1) Royalty – 7%
- 2) Corporation Income tax – 35%
- 3) Profit resource share – 70%

- 1) Royalty rate varies between 0–15% of gross revenues depending on production.
- 2) Corporation income tax is calculated as 35% on joint venture profits. This value is guaranteed against increase.
- 3) After cost recovery and taxation, profit resources are shared depending on Block; Block II 50/50%; Block III 10/90% and Block IV 30/70% in favour of the government. These splits include government participation (50%).

Other Taxes: Production bonuses.

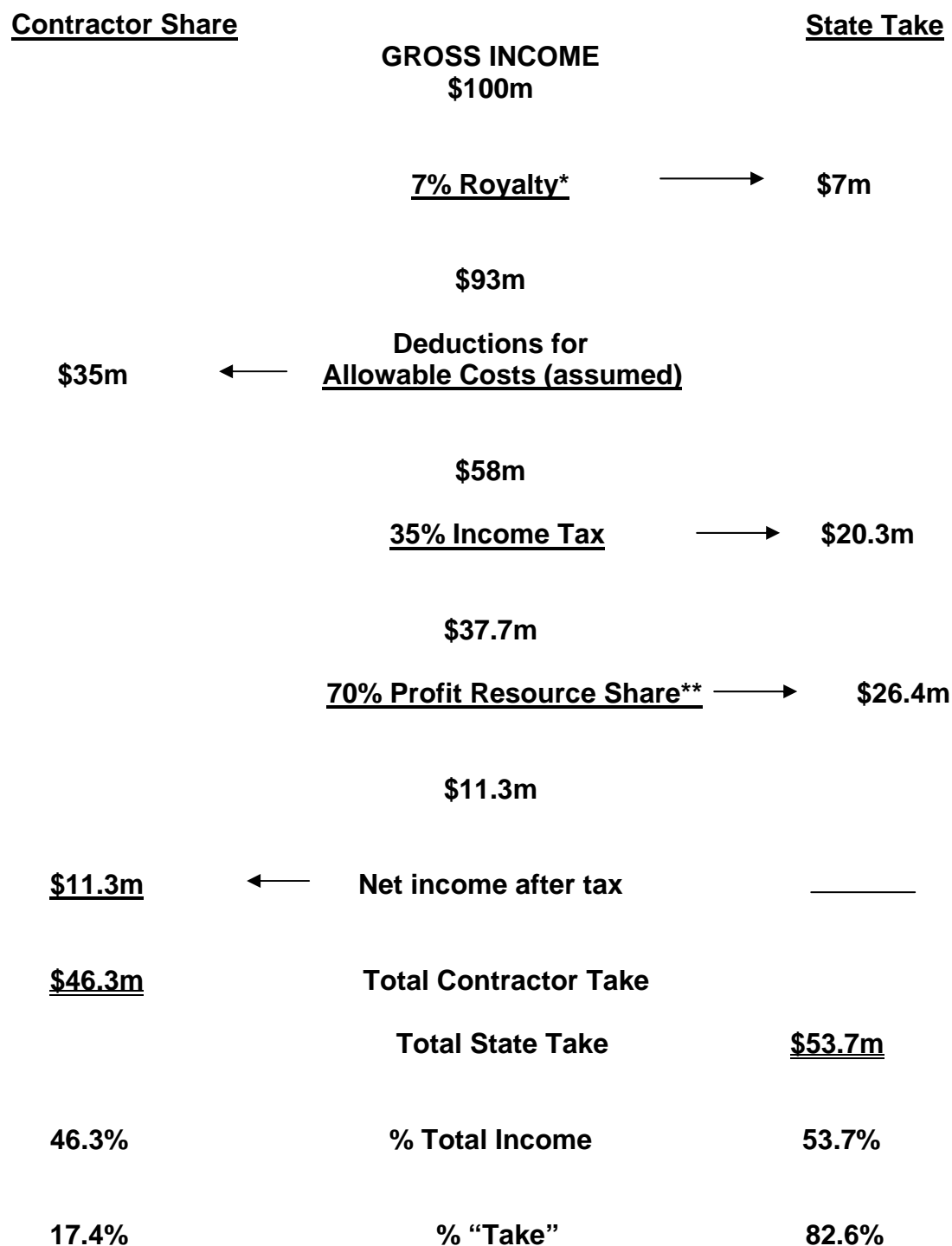
Cost Accounting: Ring fencing applies for cost recovery but not for income tax purposes.

Net operating losses are carried forward for 5 years.



**FLOW DIAGRAM FOR TURKMENISTAN
1993 JOINT ENTERPRISE CONTRACTS**

Based on Gross Income of \$100m



*= Royalty is calculated on a sliding scale depending on production (0-15%)

**= Profit resource share depends on "Block"- and factors in government participation.

Turkmenistan – 1996 Monument Production Sharing Contract (PSC)

Contract Type: Production Sharing Contract

% Government Take: 74.6%

Core Taxes Used:

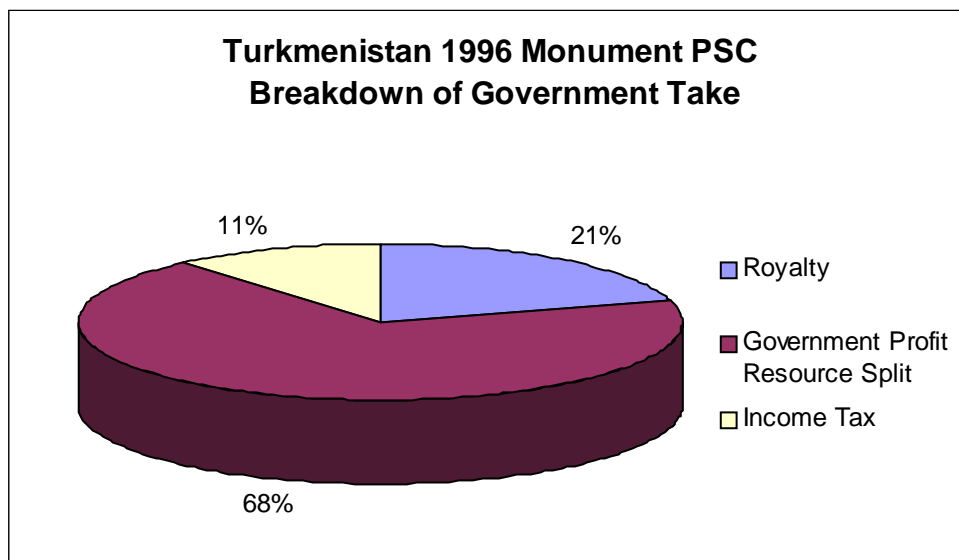
- 1) Royalty – 10%
- 2) Profit resource share – 60%
- 3) Corporation Income tax – 25%

- 1) Royalty rate varies between 3–15% of gross revenues depending on production.
- 2) After cost recovery and royalty, profit resources are shared based on a sliding scale depending on R-factor. Profit resource share varies between 40-90%.
- 3) Corporation income tax is calculated as 25% on contractor share

Cost Accounting: Capital expenditure is depreciated using a straight line method over a period of five years.

Ring fencing applies for cost recovery but not for income tax purposes.

Cost recovery is limited to 60% of net production



FLOW DIAGRAM FOR TURKMENISTAN
1996 MONUMENT PRODUCTION SHARING CONTRACT

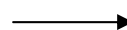
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10% Royalty*



\$10m

\$90m

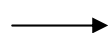
Deductions for
Allowable Costs (assumed)



\$35m

\$55m

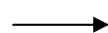
60% Profit Resource Split**



\$33m

\$22m

25% Income Tax



\$5.5m

\$16.5m



\$16.5m

Net income after tax



\$51.5m

Total Contractor Take

Total State Take

\$48.5m

51.5%

% Total Income

48.5%

25.4%

% "Take"

74.6%

**= Royalty is calculated on a sliding scale depending on production (3-15%)*

***= Profit resource share depends on R-factor (40-90%)*

Turkmenistan – 1996 Petronas Production Sharing Contract (PSC)

Contract Type: Production Sharing Contract

% Government Take: 74.6%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit resource share – 60%
- 3) Corporation income tax – 25%

- 1) Royalty rate for gas is calculated as 10% of gross revenues. For oil royalty depends on a production sliding scale (3–15%).
- 2) After cost recovery and royalty, profit resources are shared based on a sliding scale depending R- factor. Profit resource share varies between 35-90%.
- 3) Corporation income tax is calculated as 25% on contractor share

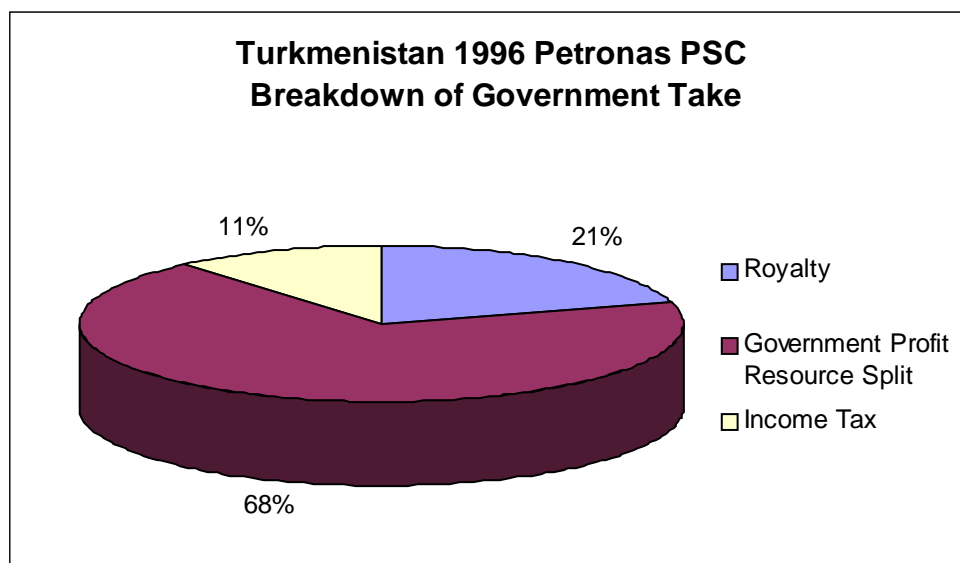
Other Taxes: Execution bonus

Cost Accounting: Capital expenditure is depreciated using a straight line method over a period of five years.

Ring fencing applies for cost recovery but not for income tax purposes

Net operating losses are carried forward for 5 years.

Cost recovery is limited to 60% for development fields and 70% for unexplored fields.



FLOW DIAGRAM FOR TURKMENISTAN
1996 MONUMENT PRODUCTION SHARING CONTRACT

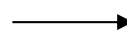
Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10% Royalty



\$10m

\$90m

Deductions for
Allowable Costs (assumed)



\$35m

\$55m

60% Profit Resource Split*



\$33m

\$22m

25% Income Tax



\$5.5m

\$16.5m



\$16.5m

Net income after tax



\$51.5m

Total Contractor Take

Total State Take

\$48.5m

51.5%

% Total Income

48.5%

25.4%

% "Take"

74.6%

*= Profit resource share depends on R-factor (35-90%)

United Kingdom – 1996/1998 Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 33%

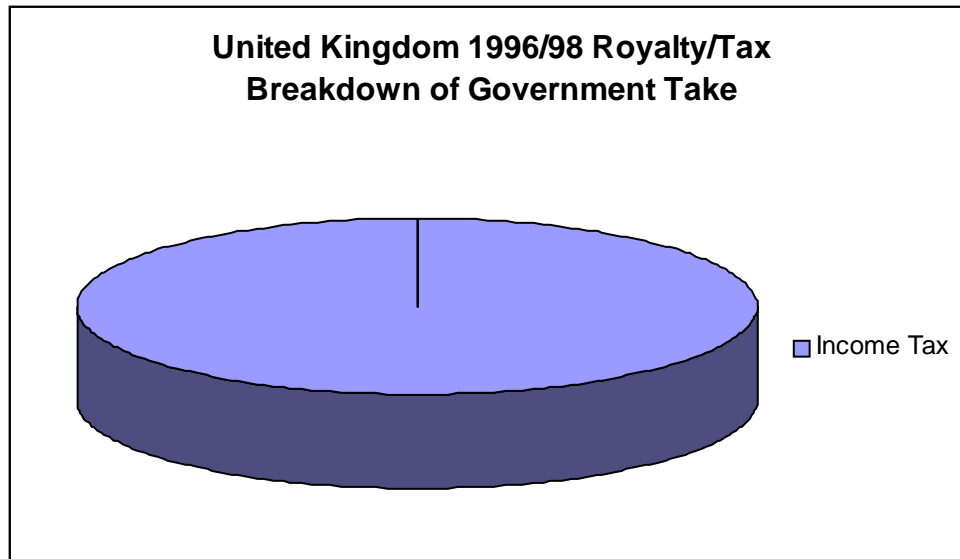
Core Taxes Used: 1) Corporate Income Taxes – 33%

- 1) Corporate income tax is levied at a rate of 33% on profits remaining after the deduction of costs.

Cost Accounting: Capital costs are depreciated using a 25% reducing balance method.

35% uplift on some capital costs for Petroleum Resource Tax (PRT)

Individual Fields are ring fenced for PRT, but not for income tax



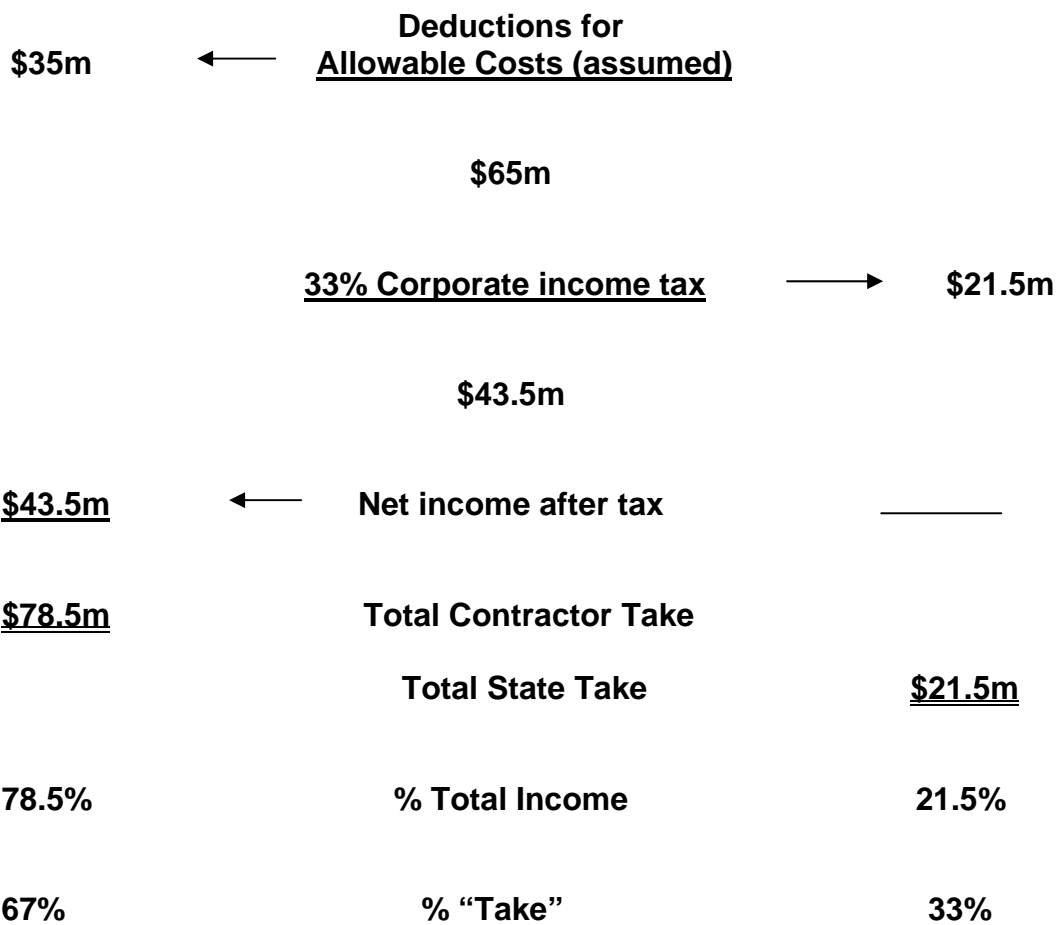
FLOW DIAGRAM FOR UNITED KINGDOM
1996/98 – ROYALTY/TAX

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m



United Kingdom – 1999+ Royalty/Tax

Contract Type: Royalty Tax System

% Government Take: 31%

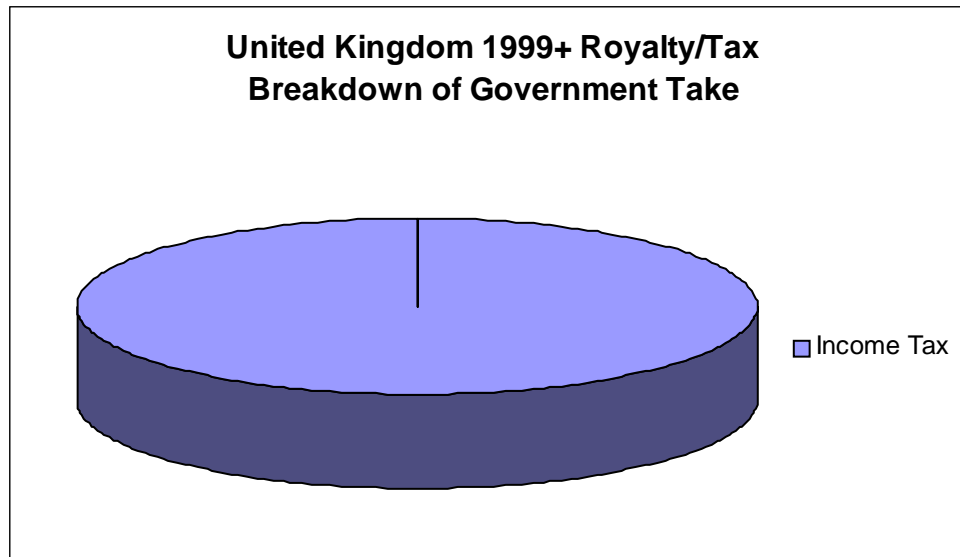
Core Taxes Used: 1) Corporate Income Taxes – 31%

- 1) Corporate income tax is levied at a rate of 31% on profits remaining after the deduction of costs.

Cost Accounting: Capital costs are depreciated using a 25% reducing balance method.

35% uplift on some capital costs for Petroleum Resource Tax (PRT)

Individual Fields are ring fenced for PRT, but not for income tax



FLOW DIAGRAM FOR UNITED KINGDOM
1999+ – ROYALTY/TAX

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$65m

31% Corporate income tax → **\$20.2m**

\$44.8m

\$44.8m ← **Net income after tax**

\$79.8m **Total Contractor Take**

Total State Take **\$20.2m**

79.8% **% Total Income** **20.2%**

69% **% "Take"** **31%**

Vietnam– 1988 Fina/Shell Contract

Contract Type: Production Sharing Contract

% Government Take: 77.1%

Core Taxes Used:

- 1) Government participation – 15%
- 2) Profit resource share - 73%

1) The government is entitled to 15% of profit resource through participation

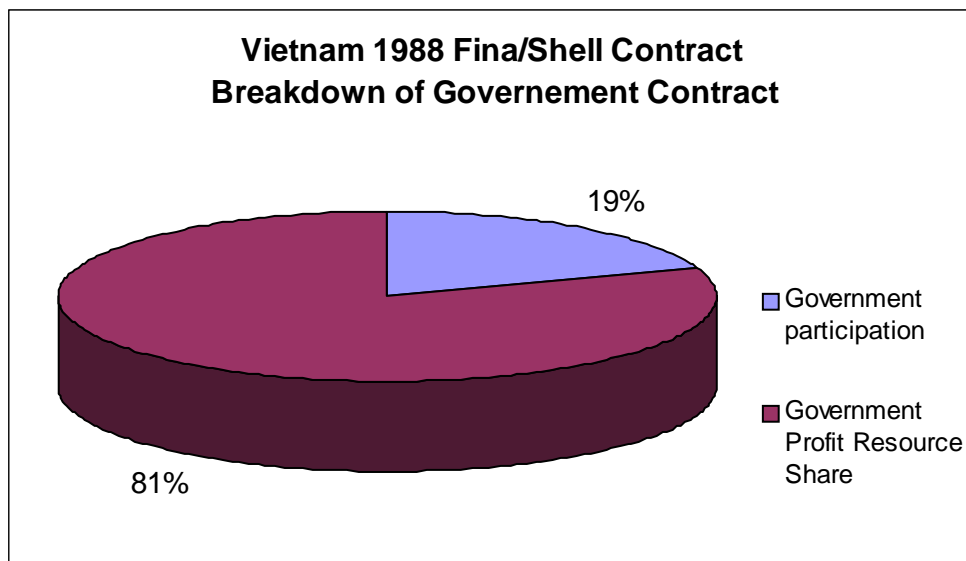
2) After contractors cost recovery and government participation, resources are split according to a sliding scale based on production, with the government share ranging from 60-84%.

Other Taxes: Signature bonus
Production bonus (including start up).

Domestic market obligation: Government has the option to purchase all resources at market price

Cost Accounting: Cost ring fencing applies by contract

Cost recovery is limited to 60% for gas and 38.5% for oil.



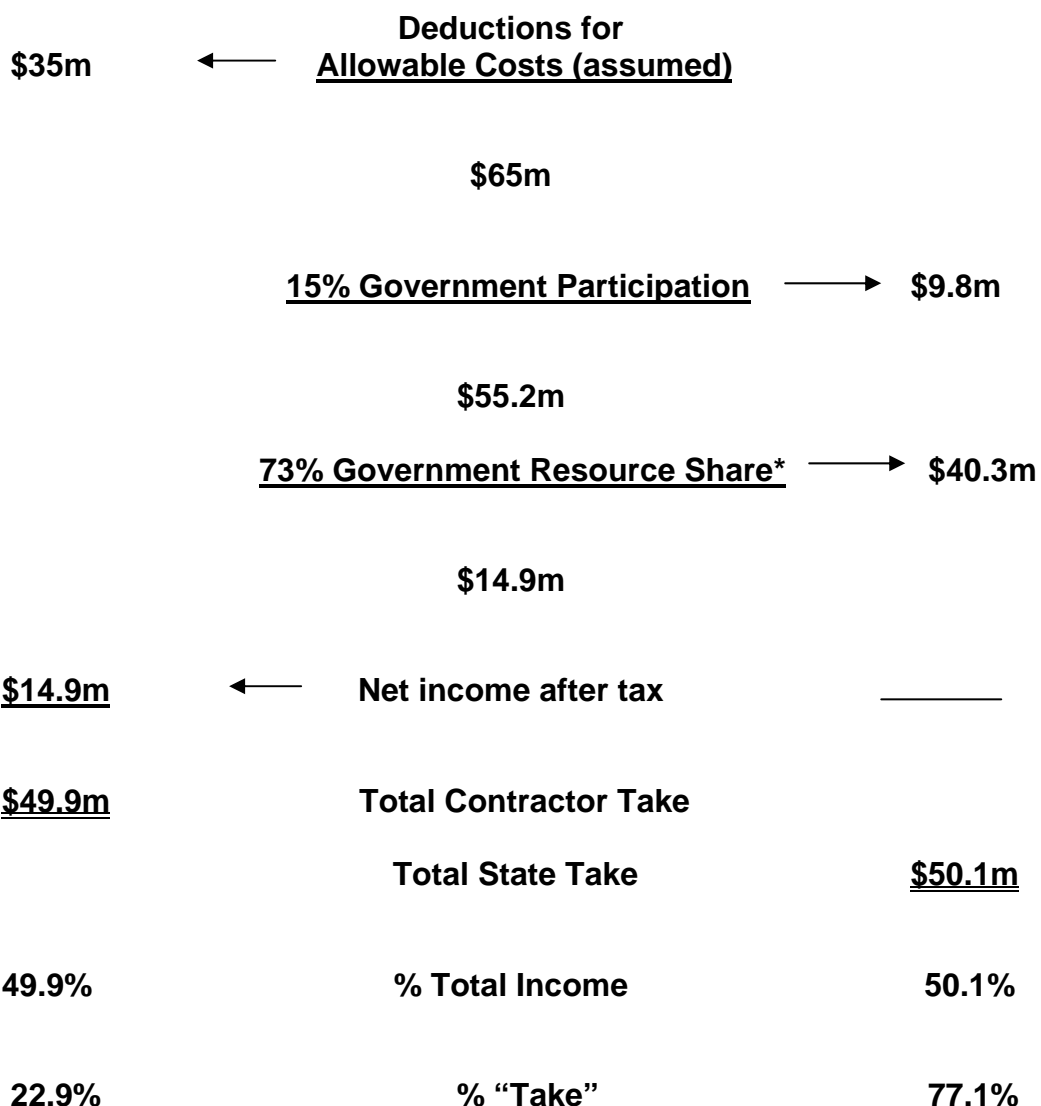
FLOW DIAGRAM FOR VIETNAM
1988 FINA/SHELL CONTRACT

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m



*= Government share of resources range between 60-84% depending on productivity

Vietnam– 1991 PetroMin Magazine Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 76%

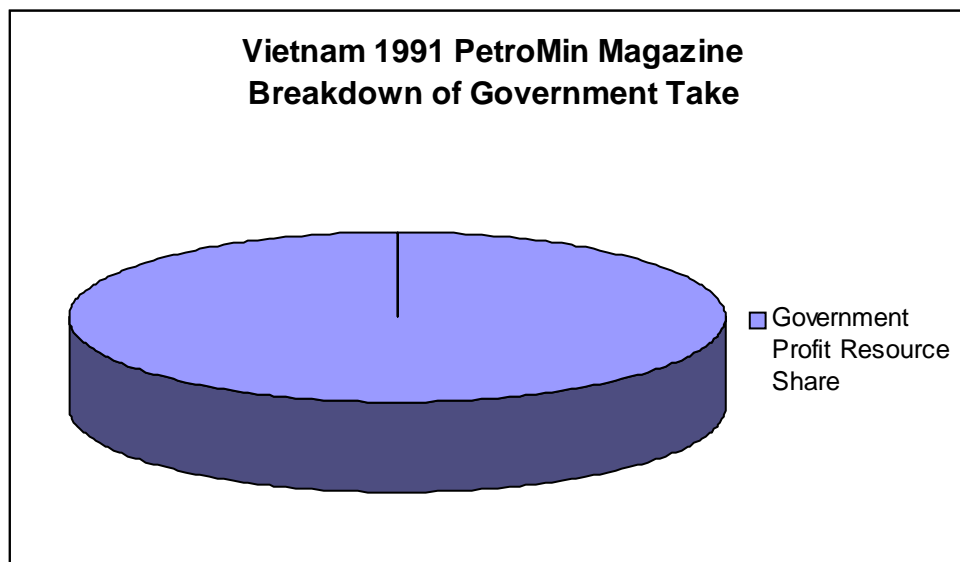
Core Taxes Used: 1) Profit resource share - 76%

- 1) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 67-80%. If production increases over 100,001BOPD the resource split is negotiable. Profit gas split may also be negotiated: no specific information is available.

Other Taxes: Signature bonus
Production bonus

Cost Accounting: Cost ring fencing applies to all licenses.

Cost recovery is limited to 40% or 16% plus the entitlement to purchase 29-40% of oil at discounted prices.

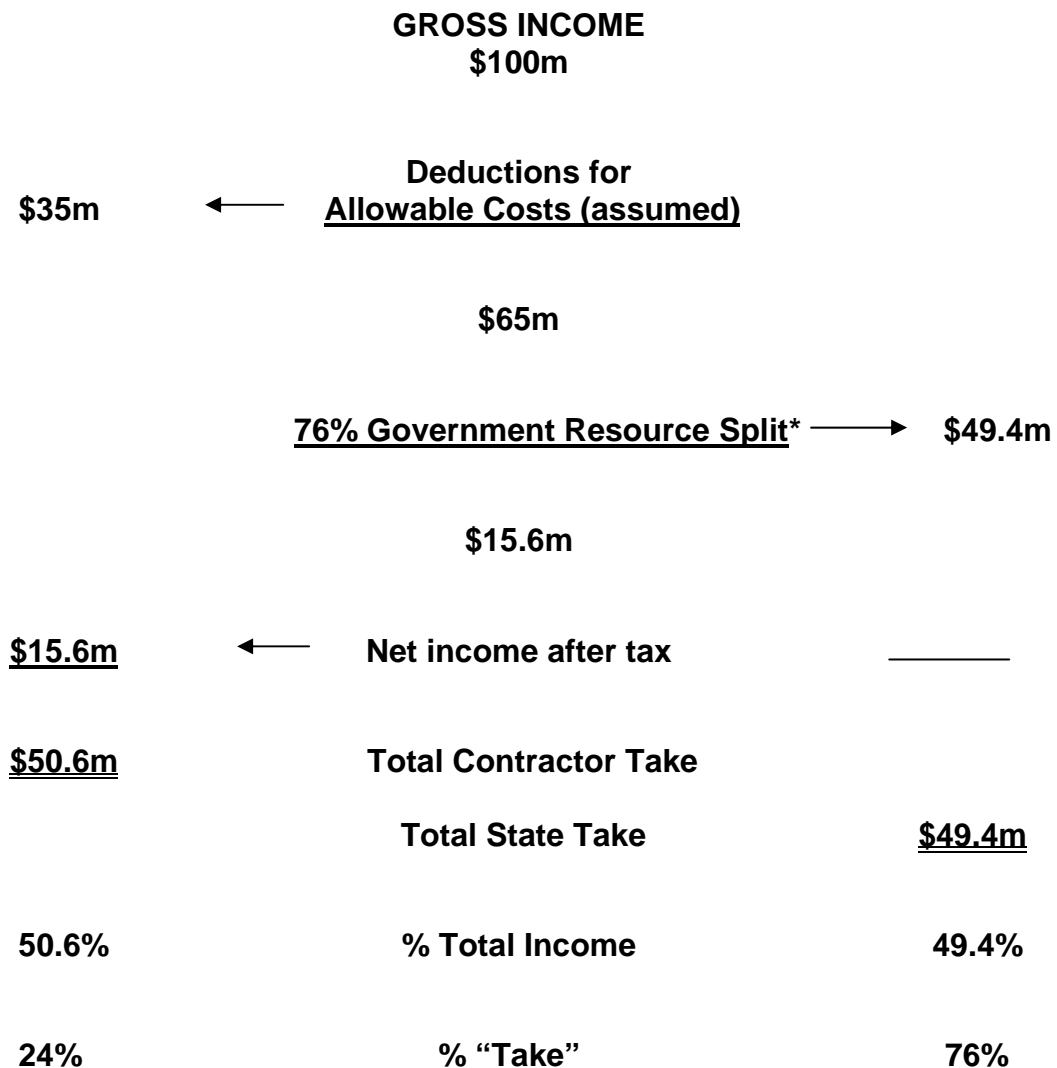


FLOW DIAGRAM FOR VIETNAM
1991 PETROMIN MAGAZINE PSC

Based on Gross Income of \$100m

Contractor Share

State Take



**= Government share of resources range between 67-80% depending on productivity.*

Vietnam– 1992 Lasmo and Itoh

Contract Type: Production Sharing Contract

% Government Take: 82.2%

Core Taxes Used:

- 1) Government participation – 15%
- 2) Profit resource share - 79%

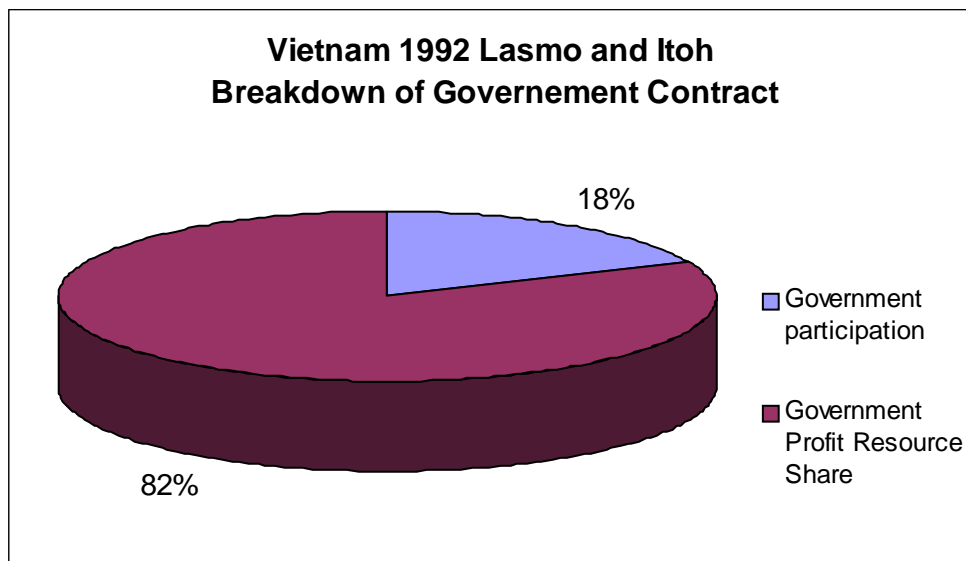
- 1) The government is entitled to 15% of profit resource through participation.
- 2) After contractors cost recovery and government participation, resources are split according to a sliding scale based on production, with the government share ranging from 71-86%. Gas figure are treated with a separate “Gas Clause”; no specific information is available.

Other Taxes:

- Signature bonus
- Production bonus
- Training fund (not cost recoverable)
- Data Purchase

Cost Accounting: Cost ring fencing applies by contract

Cost recovery is limited to 35% for 0-50,000 BOPD and 32% when production is greater than 50,000 BOPD.



FLOW DIAGRAM FOR VIETNAM
1992 LASMO AND ITOH

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$65m

15% Government Participation → **\$9.8m**

\$55.2m

79% Government Resource share* → **\$43.6m**

\$11.6m

\$11.6m ← **Net income after tax**

\$46.6m **Total Contractor Take**

Total State Take **\$53.4m**

46.6% **% Total Income** **53.4%**

17.8% **% "Take"** **82.2%**

**= Government share of resources range between 71-86% depending on productivity*

Vietnam– 1994 BHP Dai Hung

Contract Type: Production Sharing Contract

% Government Take: 93.8%

Core Taxes Used:

- 1) Royalty –35%
- 2) Government participation – 15%
- 3) Profit resource share - 70%
- 4) Corporate income tax – 47%

- 1) Royalty varies between 25–45% of gross revenues depending on production
- 2) The government is entitled to 15% of profit resource through participation.
- 3) After contractors cost recovery and government participation, resources are split according to a sliding scale based on production, with the government share ranging from 40-80%.
- 4) Corporate income tax is calculated as 47% of the contractors profit resource.

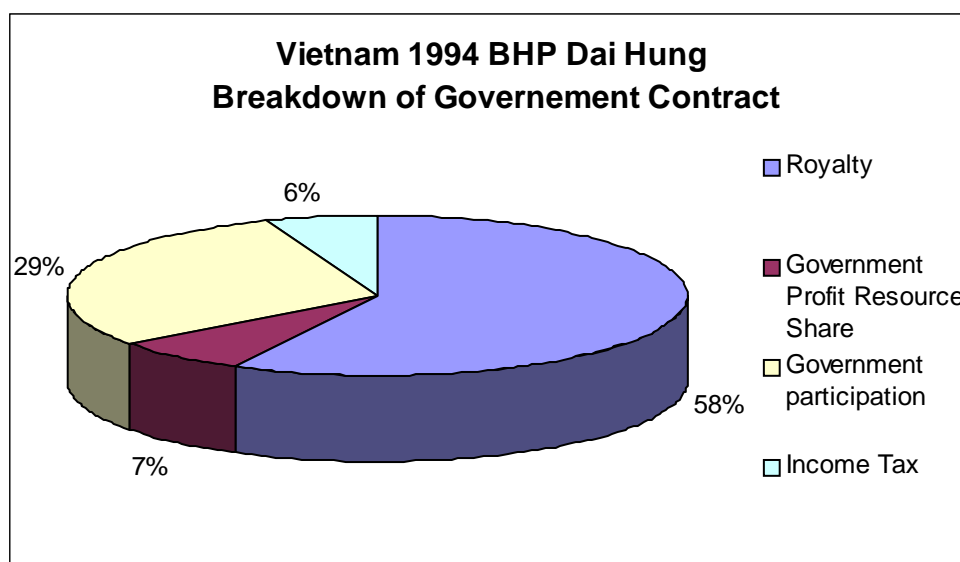
Other Taxes: Signature bonus (non recoverable)
Production bonus
Training fund (not cost recoverable)

Data Purchase

Transfer tax on profit resource retained abroad; 10%

Cost Accounting: Cost ring fencing applies by contract

Cost recovery is limited to 35%

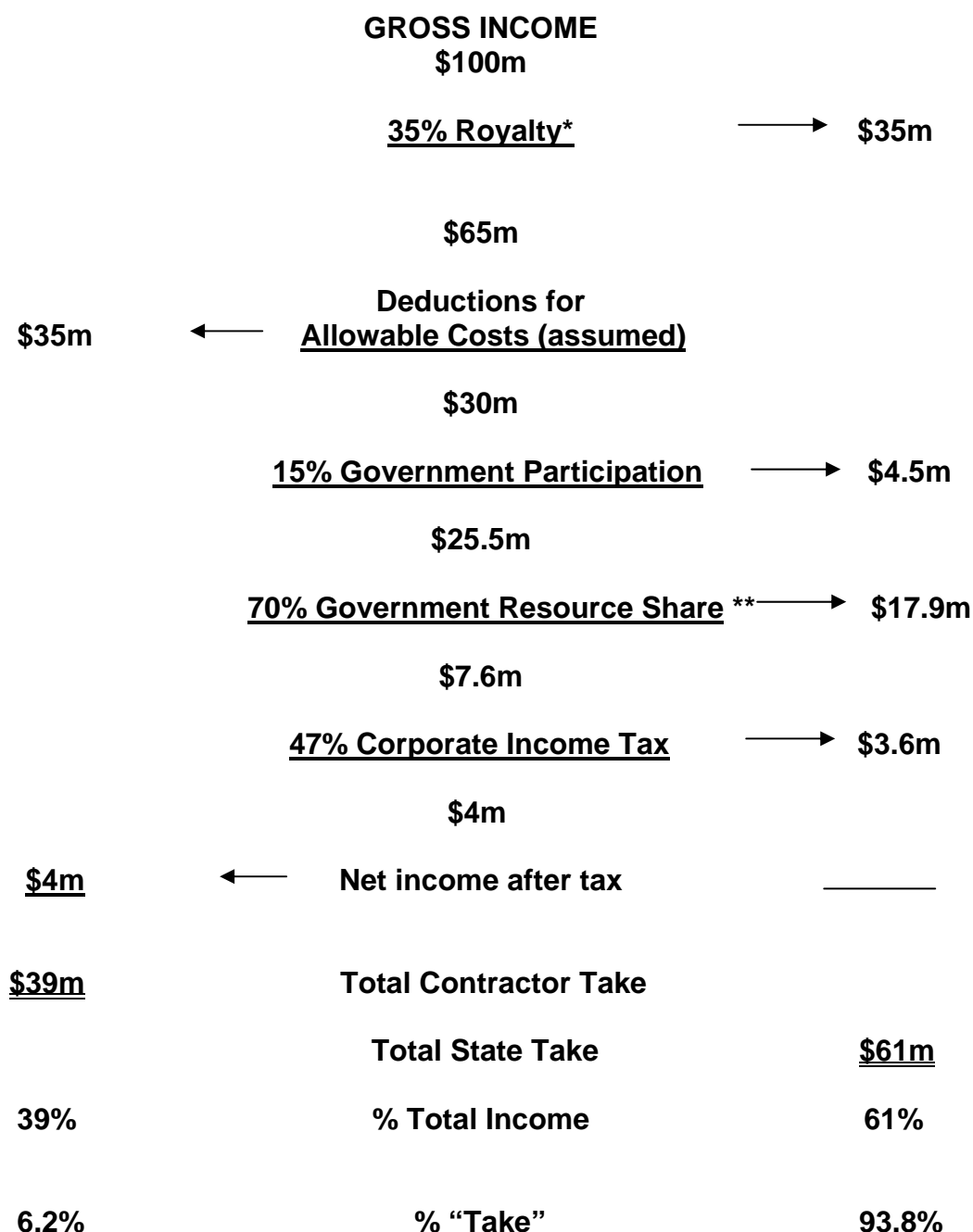


FLOW DIAGRAM FOR VIETNAM
1994 BHP DAI HUNG

Based on Gross Income of \$100m

Contractor Share

State Take



*= Royalty varies between 25-45% depending on productivity

**= Government share of resources range between 40-80% depending on productivity

Vietnam– 1994 CanOxy

Contract Type: Production Sharing Contract

% Government Take: 78.8%

Core Taxes Used:

- 1) Government participation – 15%
- 2) Profit resource share - 70%

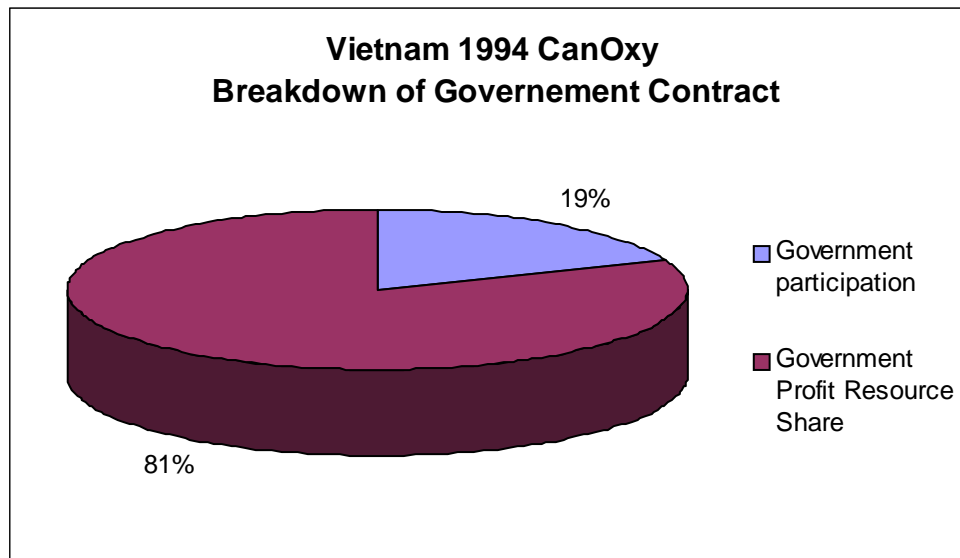
- 1) The government is entitled to 15% of profit resource through participation.
- 2) After contractors cost recovery and government participation, resources are split according to a sliding scale based on production, with the government share ranging from 65-80%.

Other Taxes:

- Signature bonus
- Production bonus (including start up bonus)
- Training fund

Cost Accounting: Cost ring fencing applies by contract

Cost recovery is limited to between 30-40% depending on production.



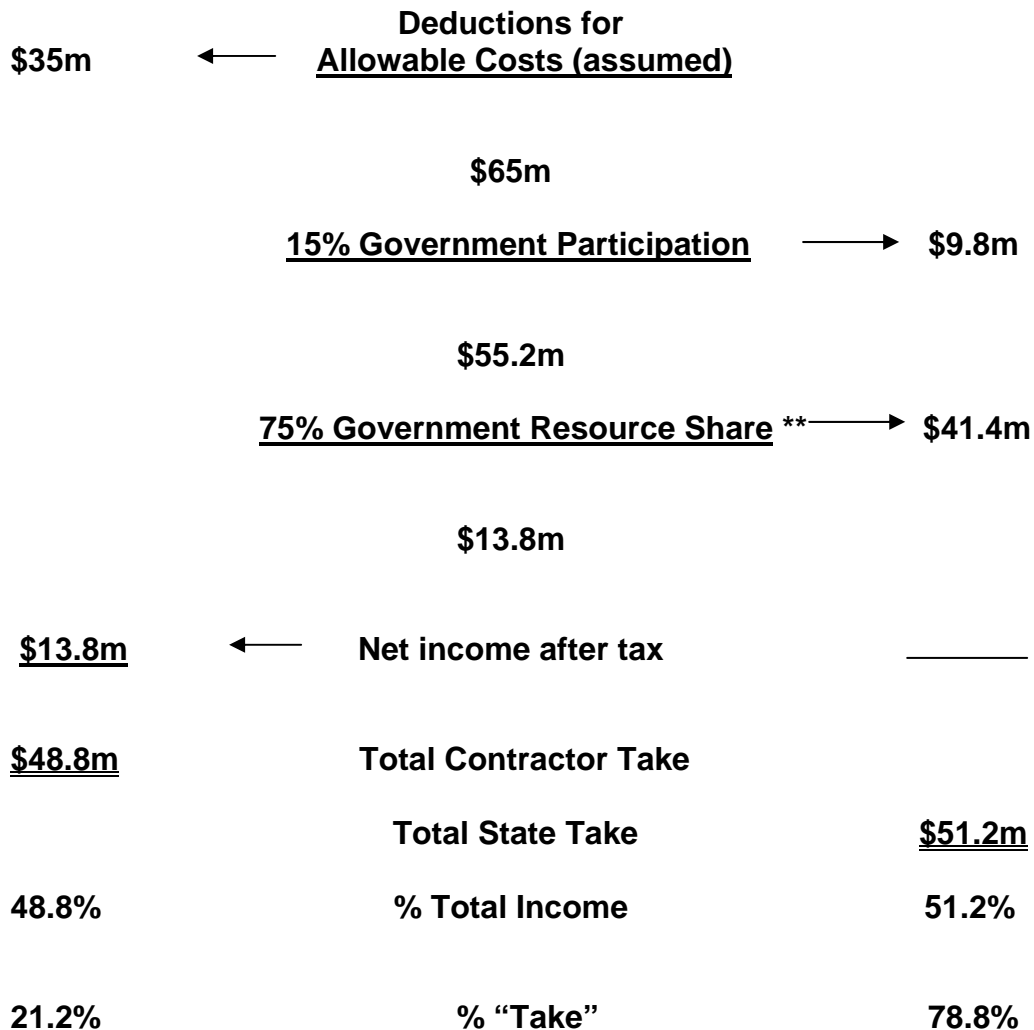
FLOW DIAGRAM FOR VIETNAM
1994 CANOXY

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m



**= Royalty varies between 25-45% depending on productivity*

***= Government share of resources range between 40-80% depending on productivity*

Vietnam– 1996 Proposed Bid Terms from Do Van Ha

Contract Type: Production Sharing Contract

% Government Take: 80.6%

Core Taxes Used:

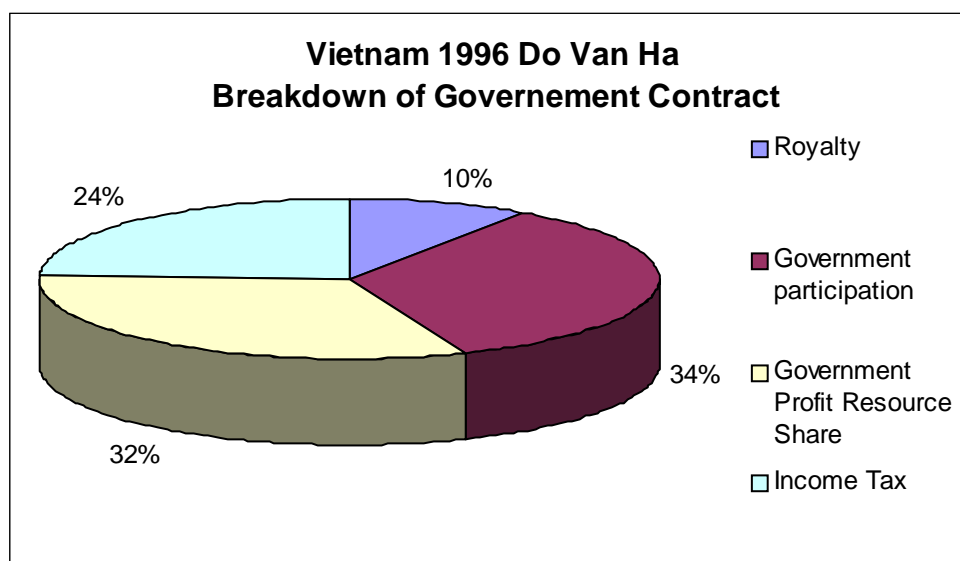
- 1) Royalty –5%
- 2) Government participation – 30%
- 3) Profit resource share - 40%
- 4) Corporate income tax – 50%

- 1) Royalty for gas varies between 0–10% of gross revenues depending on production (oil royalty ranges between 8-25%)
- 2) The government is entitled to >30% of profit resource through participation. This figure is biddable.
- 3) After contractors cost recovery and government participation, resources are shared according to bids. These bids are required to be greater than the government participation; 40% is used here
- 4) Corporate income tax is calculated as 50% of the contractors profit resource.

Other Taxes:

- Signature bonus
- Production bonus (Including start up bonus)
- Training fund
- Data Purchase
- Remittance tax on profit resource at 10%

Cost Accounting: Cost recovery is limited to less than 50%. This figure is biddable

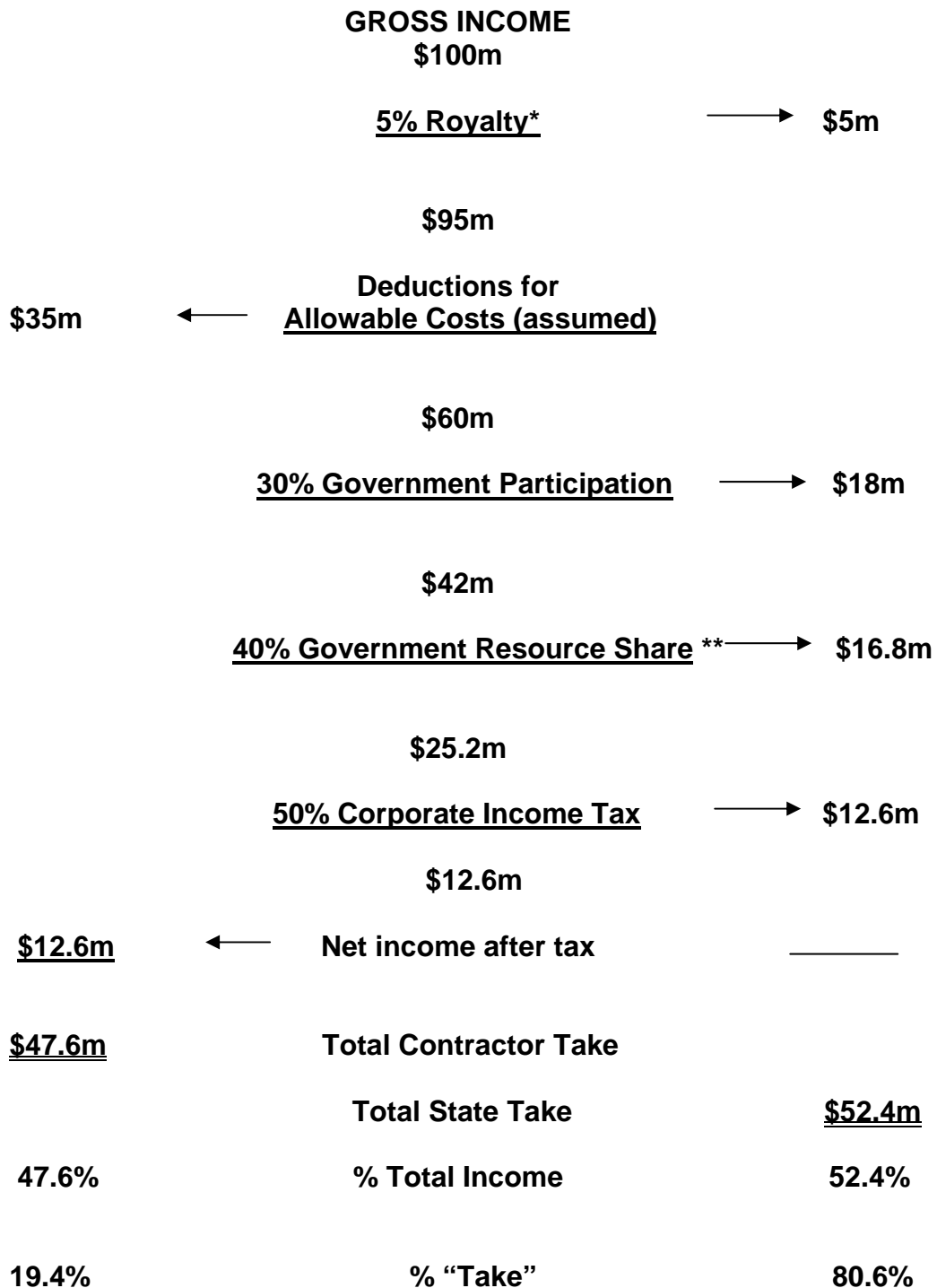


FLOW DIAGRAM FOR VIETNAM
1996 DO VAN HA

Based on Gross Income of \$100m

Contractor Share

State Take



North Yemen – 1981 Hunt Onshore PSC

Contract Type: Production Sharing Contract

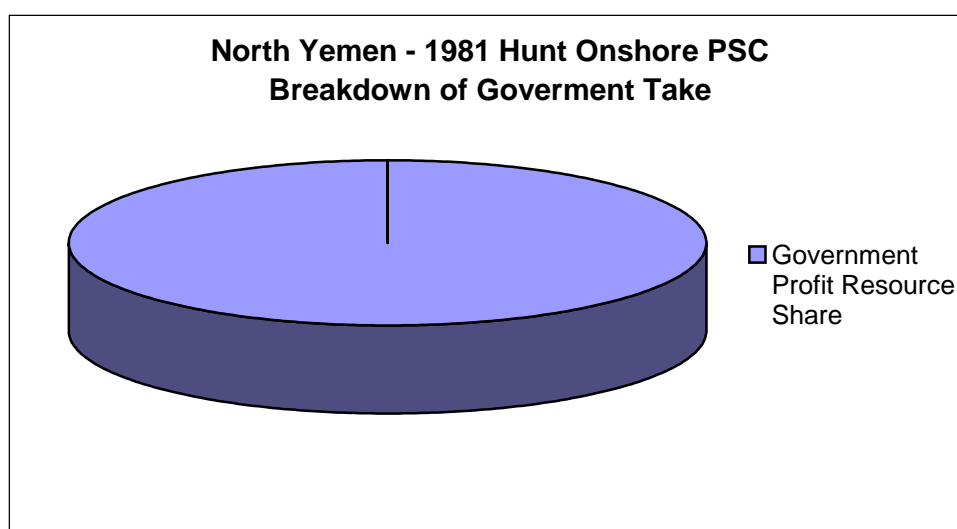
% Government Take: 85%

Core Taxes Used: 1) Profit resource split (85/15% in favour of the government)

1) After contractors cost recovery, resources are split per the above ratio

Cost Accounting: Cost ring fencing applies.

Cost recovery is limited to 30%

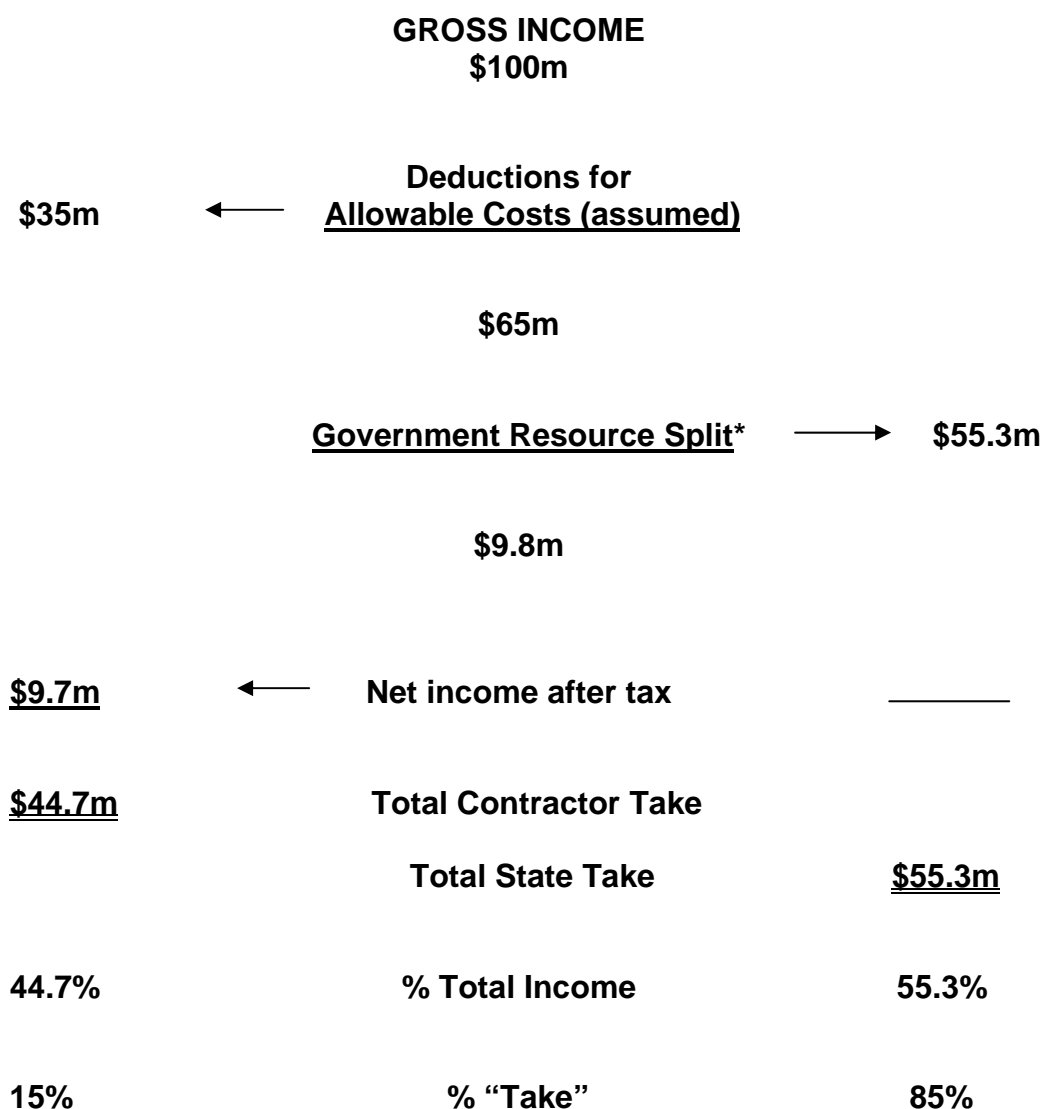


FLOW DIAGRAM FOR NORTH YEMEN
1981– HUNT ONSHORE PSC

Based on Gross Income of \$100m

Contractor Share

State Take



**= Profit resource split is usually in the ratio of 85/15% in favour of the government. However there are contracts reported with a 70/30% split and 40% C/R.*

North Yemen – 1990 Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 87.4%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit resource split –85/15% in the favour of the government

- 1) Royalty of 10% is calculated on gross revenues, for production in excess of 100,000 BOPD.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production. The governments share of the resource varies between 70-90%.

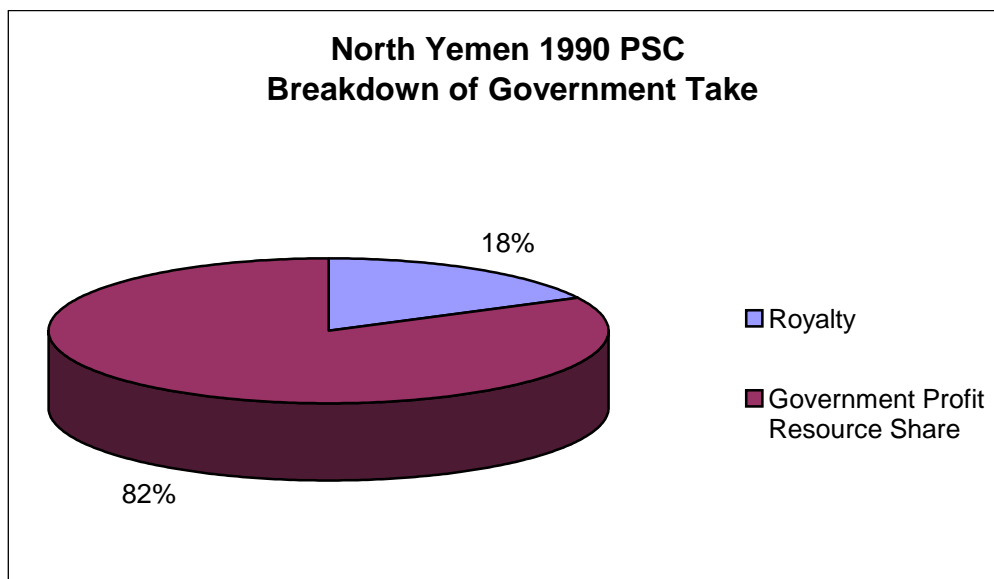
Other Taxes:

- Production bonuses
- Scholarship bonus
- Social development contribution

Cost Accounting: Capital expenditure is depreciated on a straight line basis over 5 years

Cost ring fencing applies by contract

Cost recovery is limited to 30%

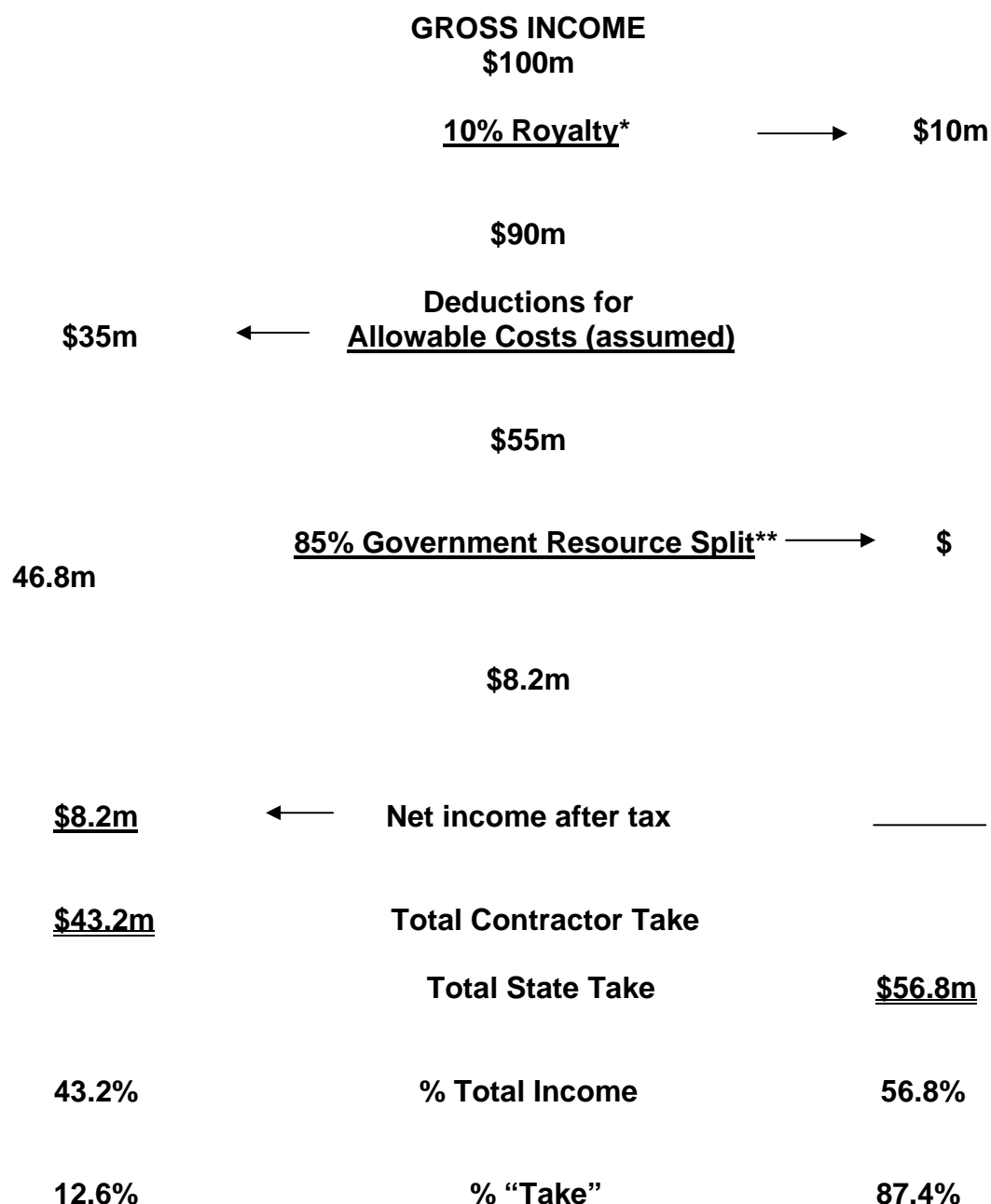


FLOW DIAGRAM FOR NORTH YEMEN
1990 PSC

Based on Gross Income of \$100m

Contractor Share

State Take



**= Royalty is calculated for production in excess of 100,000 BOPD*

** = Profit resource split is calculated on a sliding scale based on production.
Government share varies between 70-90%.*

South Yemen – 1990 Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 80%

Core Taxes Used: 1) Profit resource split - 80%

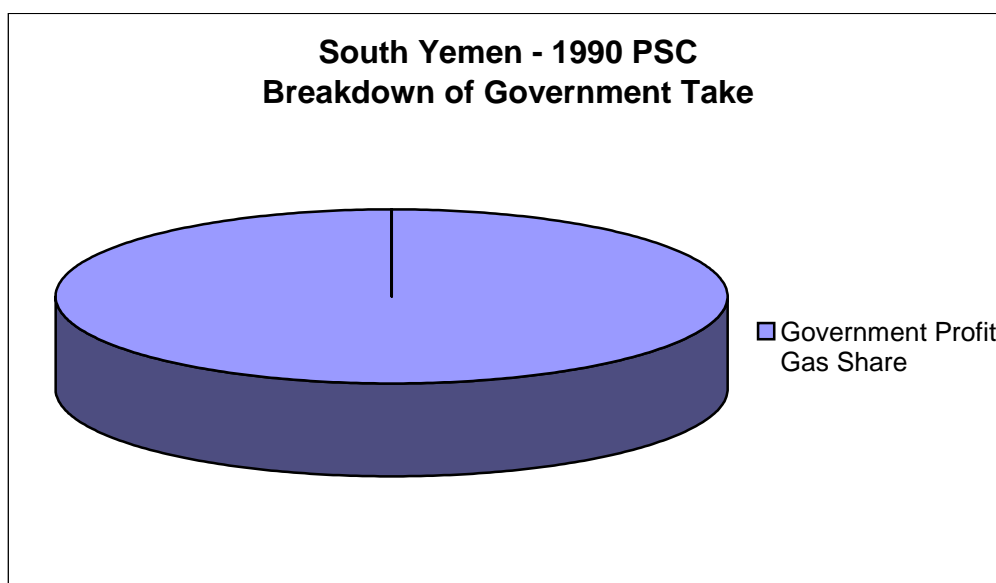
- 1) After contractors cost recovery, profit gas is split as 80/20% in favour of the government. Oil profit resources are split according to a sliding scale based on production, with the government share ranging from 67-88.5%.

Other Taxes: Production bonuses
Signature bonus
Scholarship bonus
Social development contribution

Cost Accounting: Explorations and development costs are depreciated using a straight line method depending on negotiated C/R limit. Exploration costs are depreciated over 3-4 years, and development costs between 4-6 years. All operating costs are expensed.

Cost ring fencing applies by contract.

Cost recovery limits are negotiated, usually 50% for gas and 40% for oil.



FLOW DIAGRAM FOR SOUTH YEMEN
1990 PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$65m

80% Government Resource Split → **\$52m**

\$13m

\$13m

← **Net income after tax**

\$48m

Total Contractor Take

Total State Take

\$52m

48%

% Total Income

52%

20%

% "Take"

80%

Yemen – 1986 Canoxy

Contract Type: Production Sharing Contract

% Government Take: 77.7%

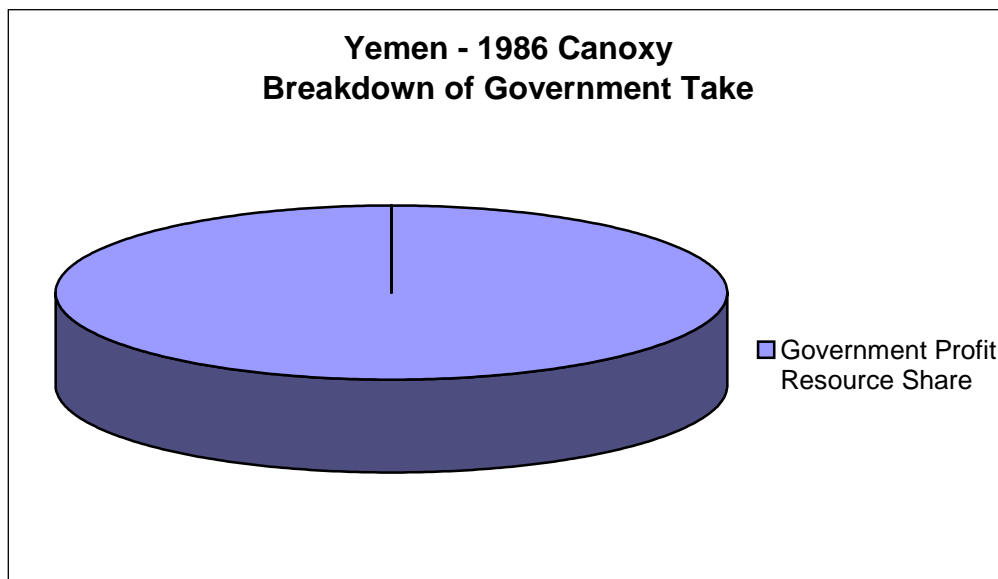
Core Taxes Used: 1) Profit resource split – 77.5%

- 1) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 66.7- 80%.

Other Taxes: Signature bonuses
Production bonuses

Cost Accounting: Exploration and development costs are depreciated on a straight line basis. Explorations costs are depreciated over 4 years and development costs over 6 years.

Cost recovery is limited to 40% of gross revenues less royalties.



FLOW DIAGRAM FOR YEMEN
1986 CANOXY

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$65m

77.5% Government Resource Split* → **\$50.4m**

\$14.6m

\$12.4m



Net income after tax



\$49.6m

Total Contractor Take

Total State Take

\$50.4m

49.6%

% Total Income

50.4%

22.5%

% "Take"

77.5%

**= Government share of resources range between 66.7- 80% depending on production*

Yemen – 1987 Total

Contract Type: Production Sharing Contract

% Government Take: 85%

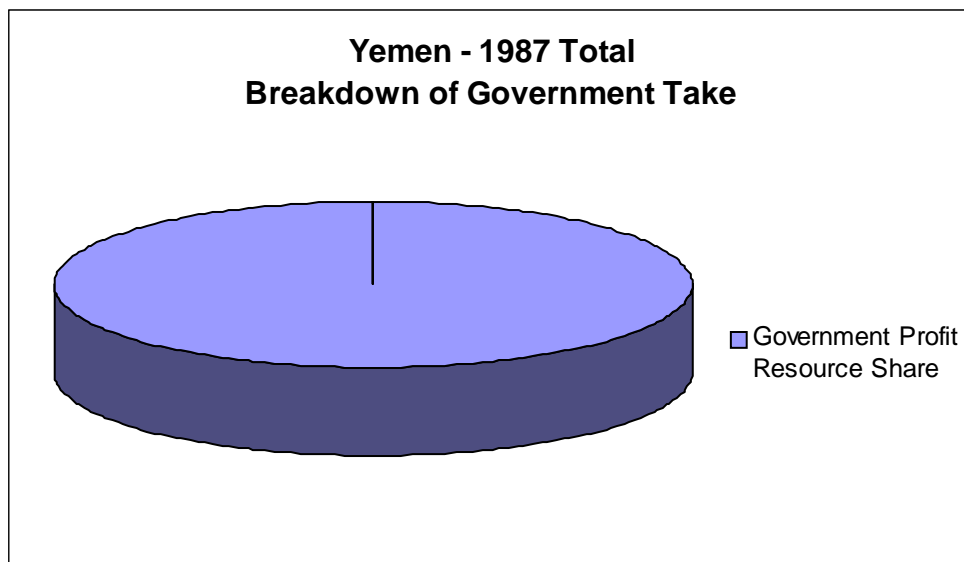
Core Taxes Used: 1) Profit resource split – 85%

- 1) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 72.5 - 88.5%.

Other Taxes: Signature bonuses
Production bonuses

Cost Accounting: Exploration and development costs are depreciated on a straight line basis. Explorations costs are depreciated over 3 years and development costs over 4 years.

Cost recovery is limited to 40% of gross revenues less royalties.



FLOW DIAGRAM FOR YEMEN
1987 TOTAL

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

\$35m ← **Deductions for**
Allowable Costs (assumed)

\$65m

85% Government Resource Split* → **\$55.3m**

\$9.7m

\$9.7m



Net income after tax



\$44.7m

Total Contractor Take

Total State Take

\$55.3m

44.7%

% Total Income

55.3%

15%

% "Take"

85%

**= Government share of resources range between 72.5 - 88.5% depending on production*

Yemen – 1991 Clyde

Contract Type: Production Sharing Contract

% Government Take: 87.4%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit resource split –85%

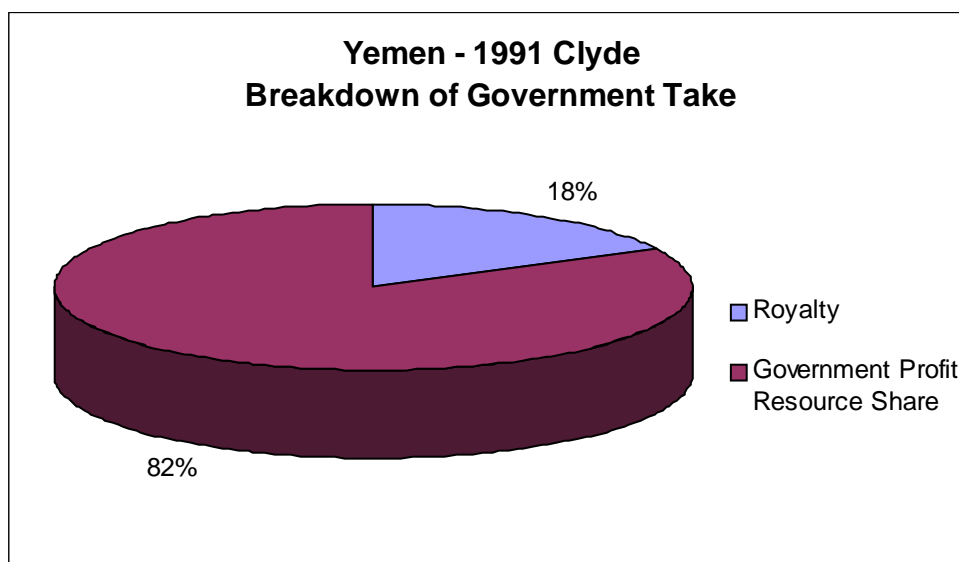
- 1) Royalty of 10% is calculated on gross revenues
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 77 - 90%.

Other Taxes:

- Signature bonus
- Production bonuses (including start-up bonus)
- Training bonuses

Cost Accounting: Development costs are depreciated on a straight line basis over 4 years. Explorations costs are fully expensed.

Cost recovery is limited to 25% of gross revenues less royalties.

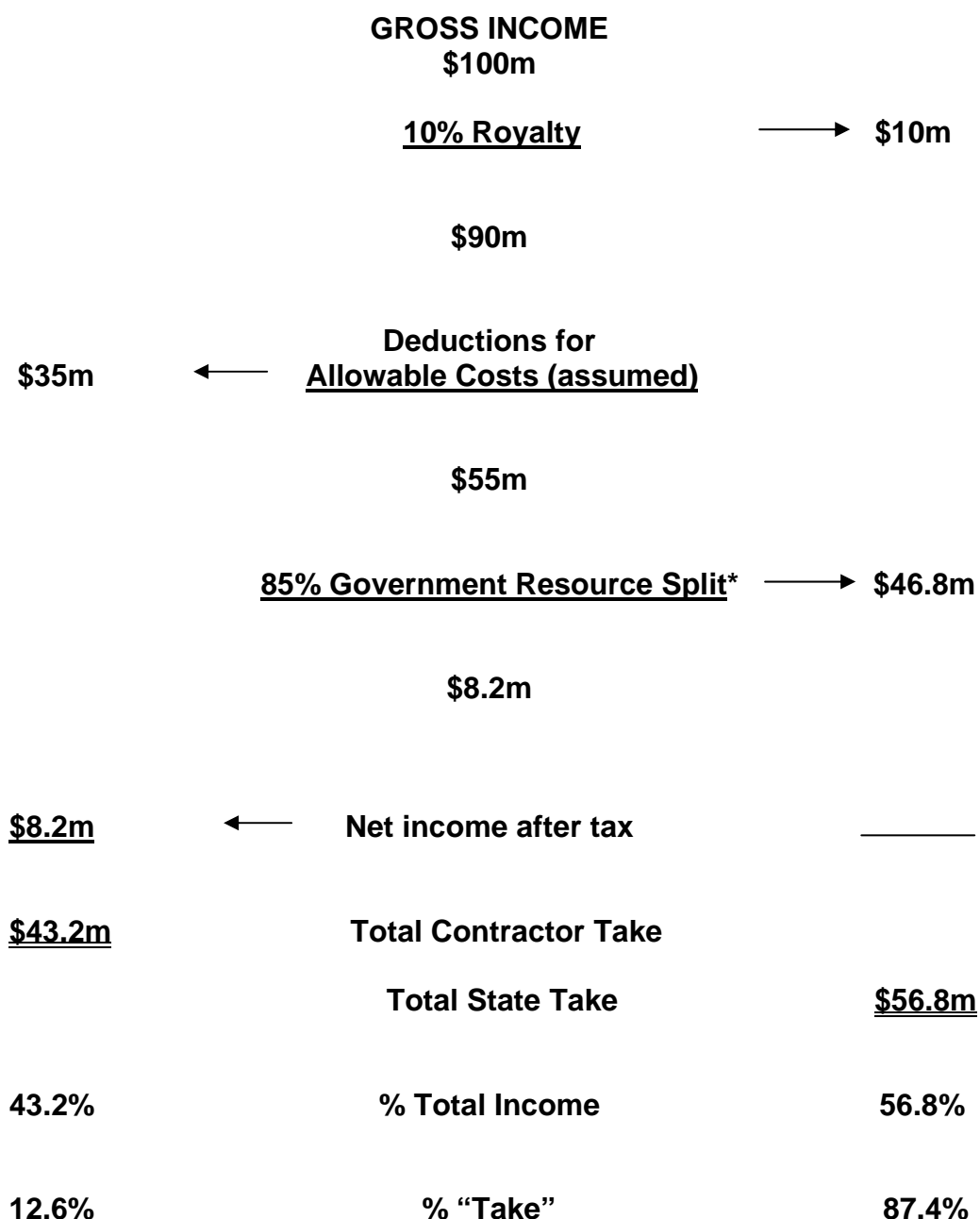


FLOW DIAGRAM FOR YEMEN
1991 CLYDE

Based on Gross Income of \$100m

Contractor Share

State Take



**= Government share of resources range between 77 - 90% depending on production*

Yemen – Clyde Block 2

Contract Type: Production Sharing Contract

% Government Take: 87.4%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit resource split –85%

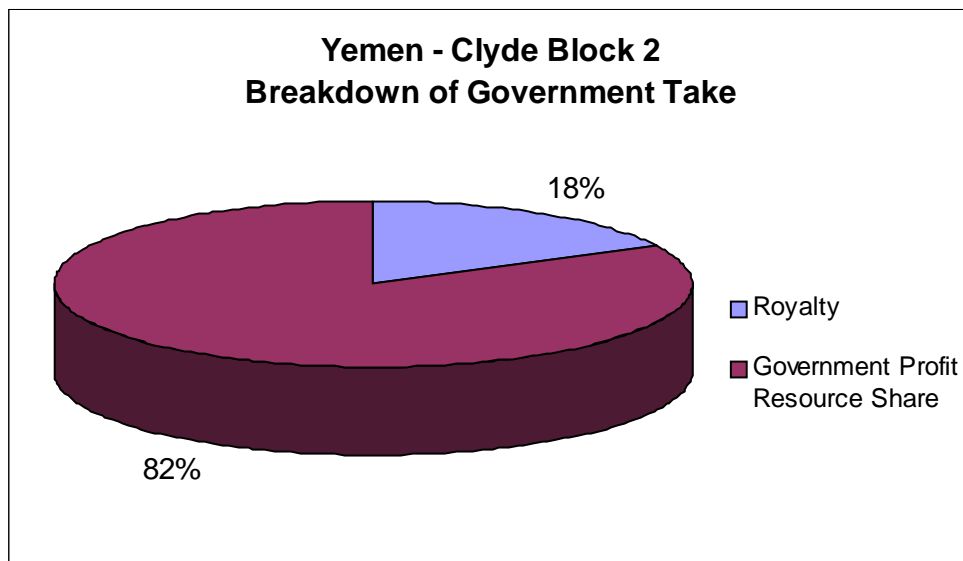
- 1) Royalties are calculated using a sliding scale based on production. The scale varies between 2.5-20%
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 78–92.5%.

Other Taxes:

- Signature bonus
- Production bonuses (including start-up bonus)
- Training bonuses

Cost Accounting: Development costs are depreciated on a straight line basis over 4 years. Explorations costs are fully expensed.

Cost recovery is limited to 27% of gross revenues less royalties.

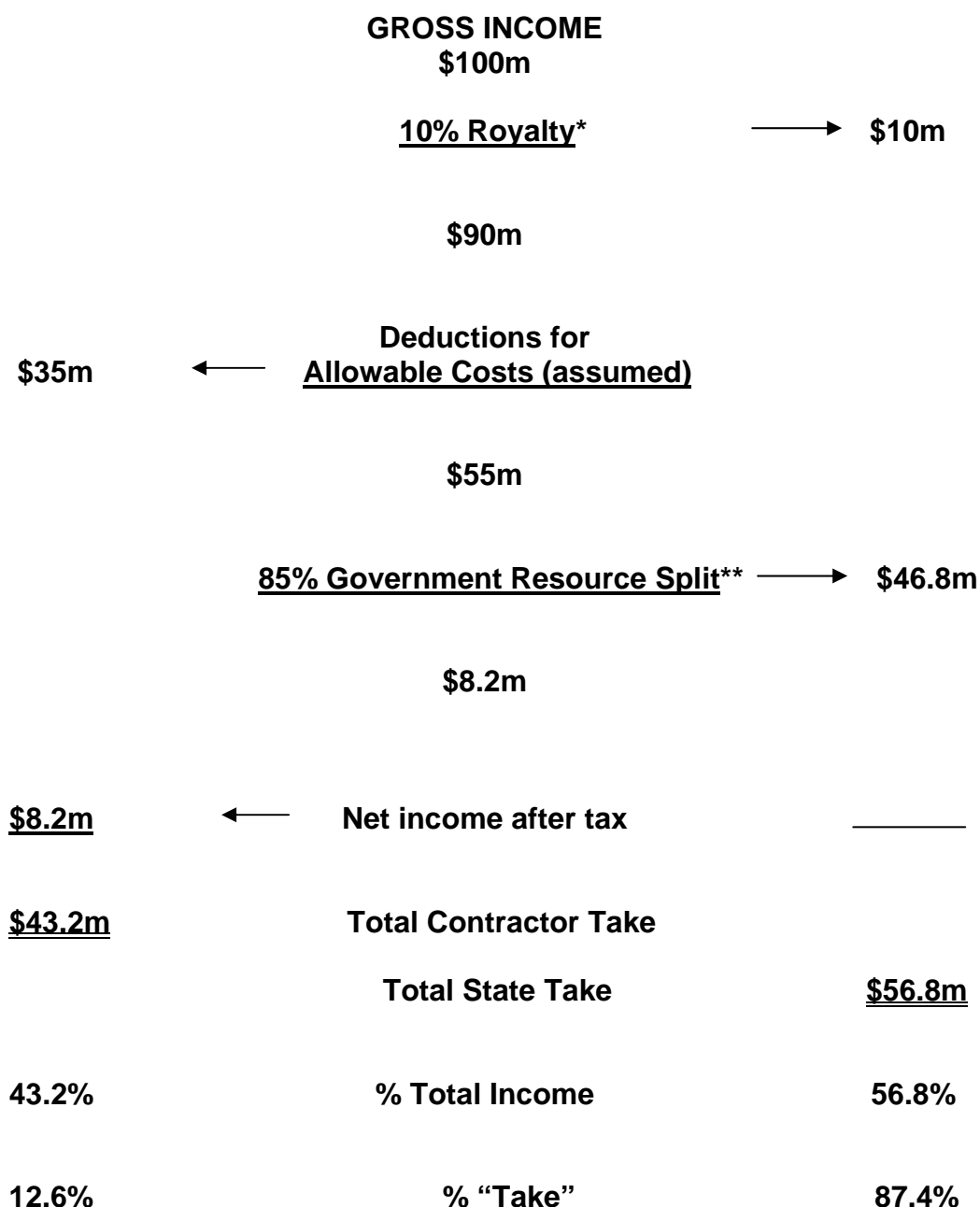


FLOW DIAGRAM FOR YEMEN
CLYDE BLOCK 2

Based on Gross Income of \$100m

Contractor Share

State Take



*= Royalty varies between 2.5-20% depending on production

**= Government share of resources range between 78 – 92.5% depending on production

Yemen – 1990 BP

Contract Type: Production Sharing Contract

% Government Take: 83.1%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit resource split –80%

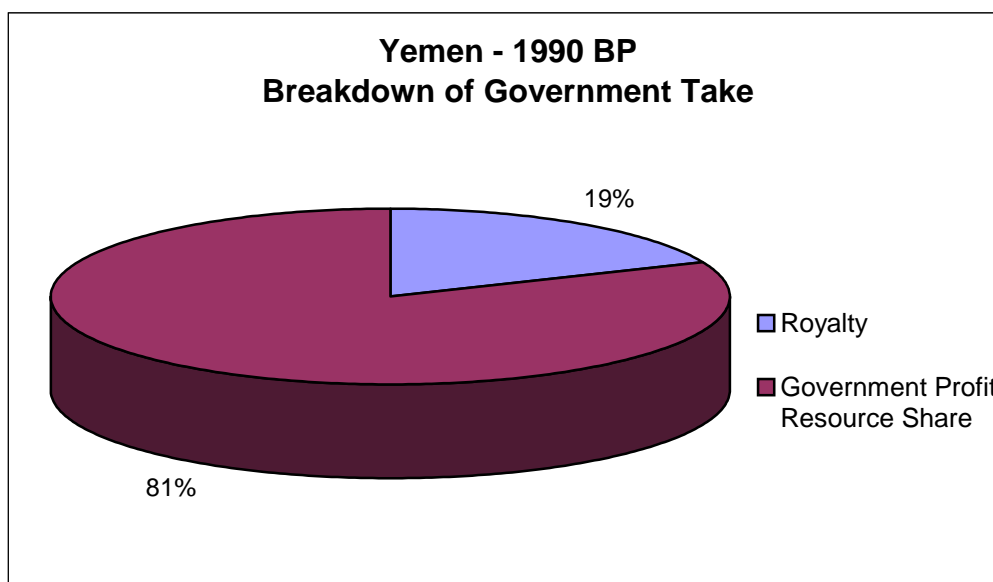
- 1) Royalties are calculated using a sliding scale based on production. The scale varies between 5-20%
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 73–90%.

Other Taxes:

- Signature bonus
- Production bonuses (including start-up bonus)
- Training bonuses

Cost Accounting: Development costs are depreciated on a straight line basis over 4 years. Explorations costs are fully expensed.

Cost recovery is limited to 27% of gross revenues less royalties.



Based on Gross Income of \$100m		
<u>Contractor Share</u>		<u>State Take</u>
	GROSS INCOME \$100m	
	<u>10% Royalty*</u>	→ \$10m
	\$90m	
	Deductions for <u>Allowable Costs (assumed)</u>	
\$35m ←		
	\$55m	
	<u>80% Government Resource Split**</u>	→ \$44m
	\$11m	
<u>\$11m</u> ←	Net income after tax	_____
<u>\$46m</u>	Total Contractor Take	
	Total State Take	<u>\$54m</u>
46%	% Total Income	54%
16.9%	% “Take”	83.1%

**= Government share of resources range between 73–90% depending on production

Yemen – 1990 OXY

Contract Type: Production Sharing Contract

% Government Take: 89.8%

Core Taxes Used:

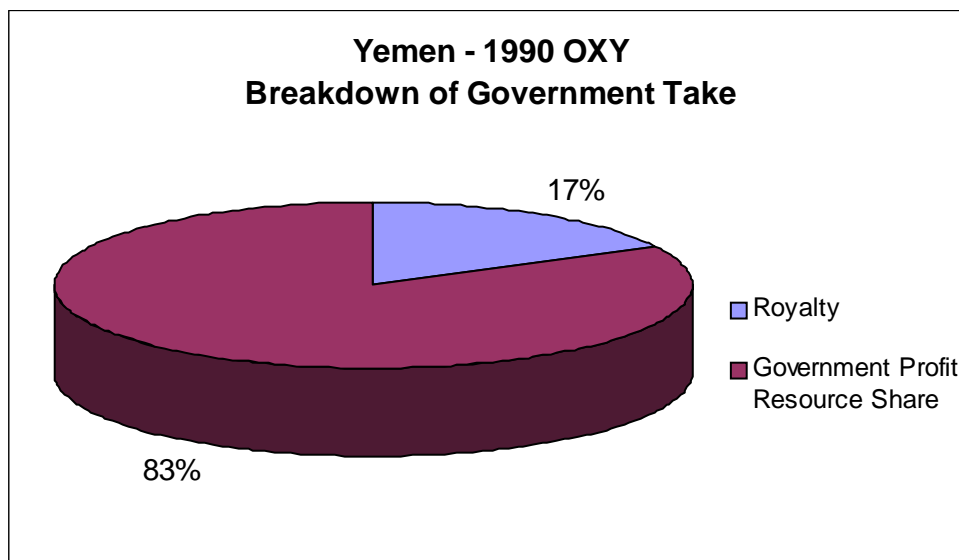
- 1) Royalty – 10%
- 2) Profit resource split –88%

- 1) Royalties are calculated as 10% of gross revenues.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 80–92%.

Other Taxes: Signature bonus
Production bonuses (including start-up bonus)
Training bonuses.

Cost Accounting: Development costs are depreciated on a straight line basis over 5 years. Explorations costs are fully expensed.

Cost recovery is limited to 26.5% of gross revenues less royalties.

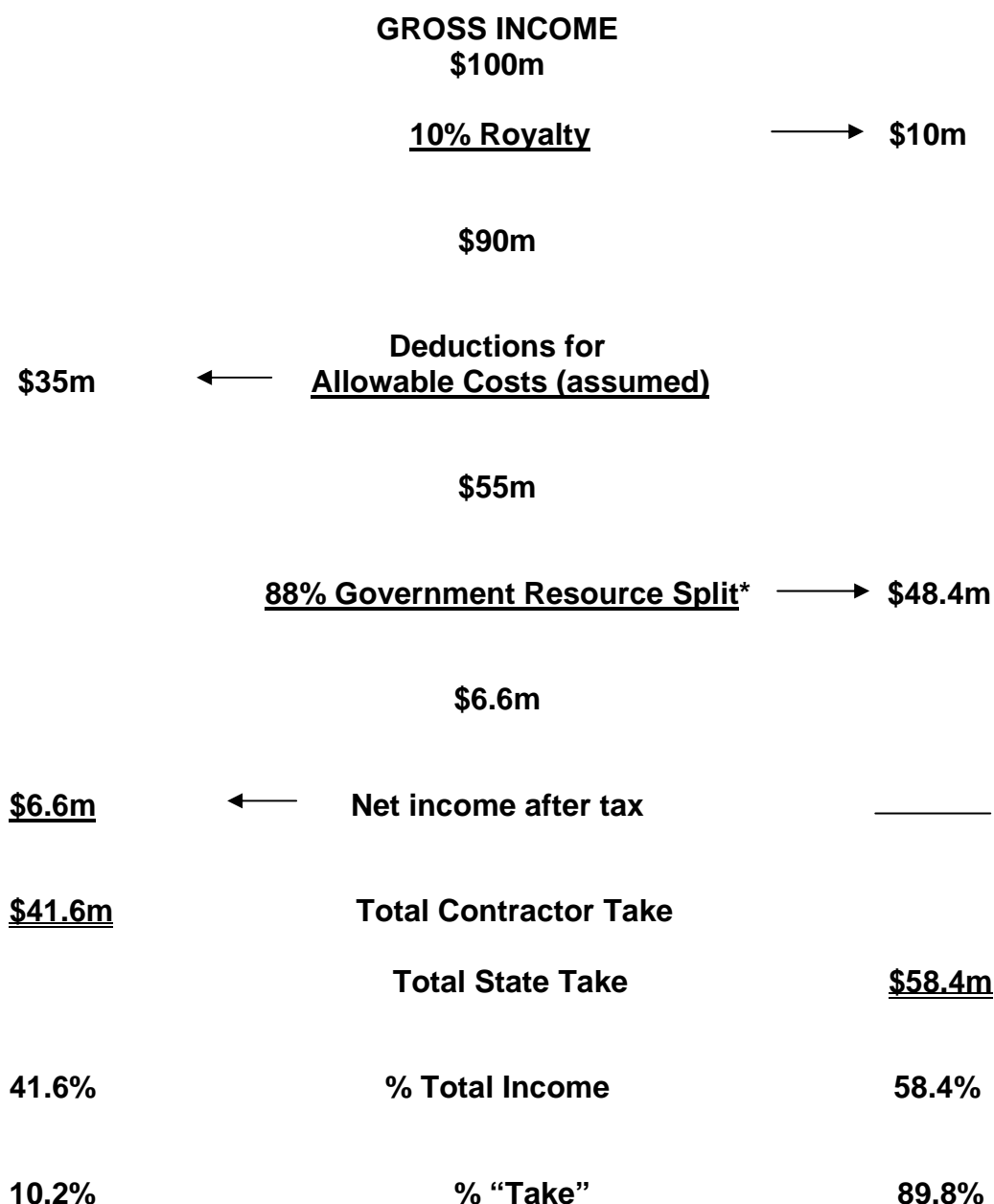


FLOW DIAGRAM FOR YEMEN
1990 OXY

Based on Gross Income of \$100m

Contractor Share

State Take



*= Government share of resources range between 80–92% depending on production

Yemen – 1990/91 Sun

Contract Type: Production Sharing Contract

% Government Take: 81.5%

Core Taxes Used:

- 1) Royalty – 5%
- 2) Profit resource split –80%

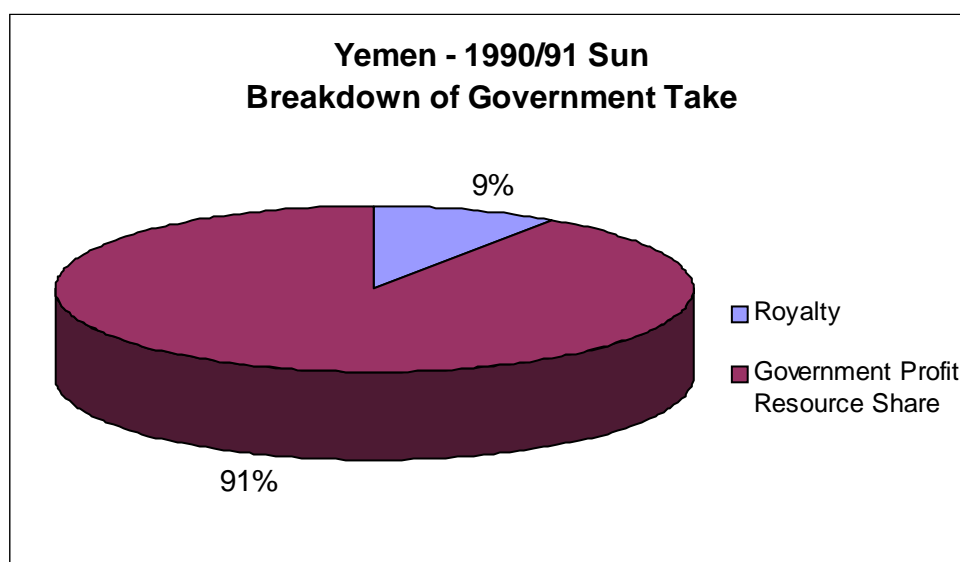
- 1) Royalties are calculated on gross revenues using a sliding scale based on production. The royalties range from 0-10%.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 72.5–90%.

Other Taxes:

- Signature bonus
- Production bonuses (including start-up bonus)
- Training bonuses

Cost Accounting: Development costs are depreciated on a straight line basis over 4 years. Explorations costs are fully expensed.

Cost recovery is limited to 27.5% of gross revenues less royalties.

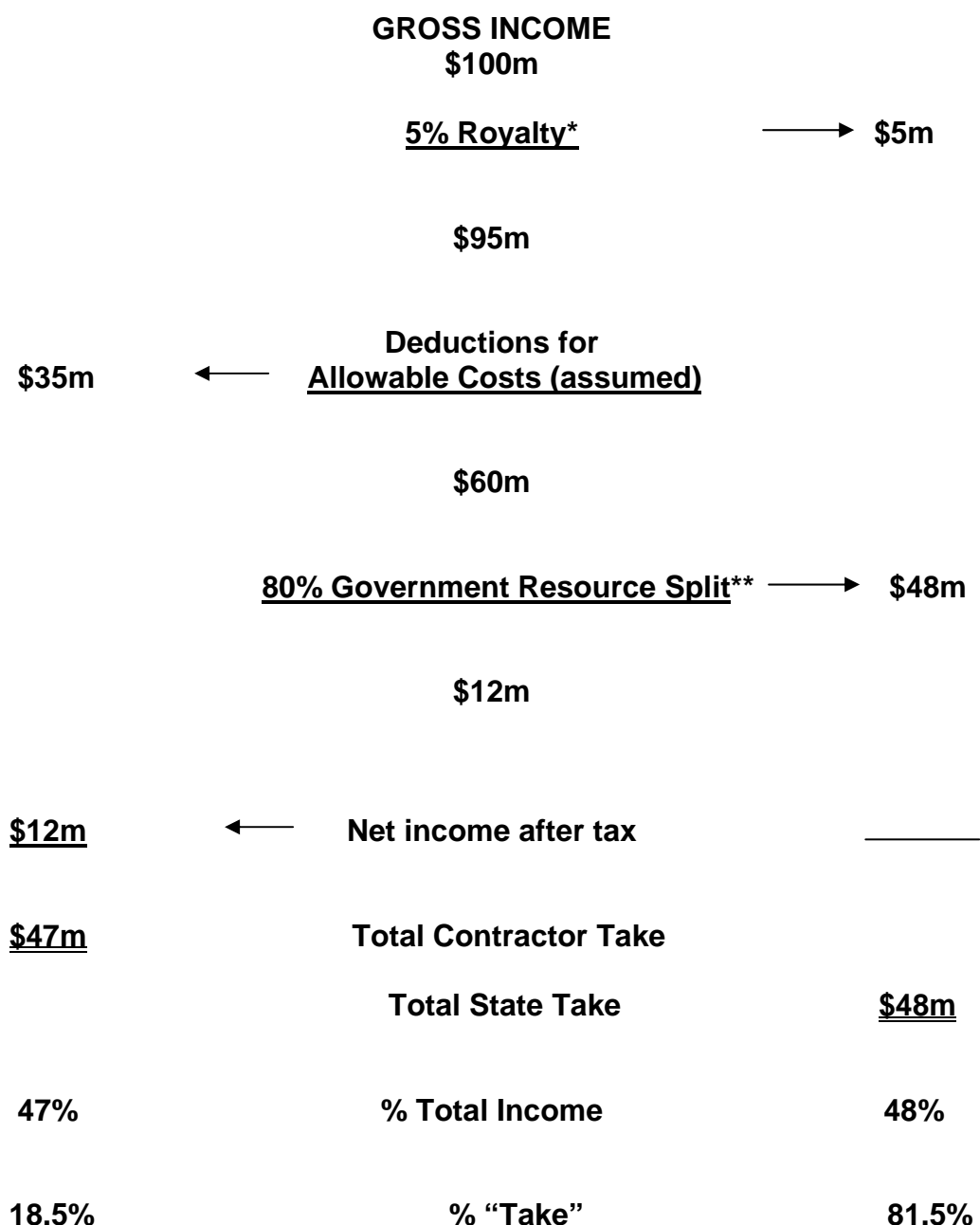


FLOW DIAGRAM FOR YEMEN
1990/91 SUN

Based on Gross Income of \$100m

Contractor Share

State Take



*= Royalties are calculated on a sliding scale based on production (0-10%)

**=Government share of resources range between 72.5–90% depending on production

Yemen– 1991 Norsk Hydro

Contract Type: Production Sharing Contract

% Government Take: 87.3%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit resource split –85%

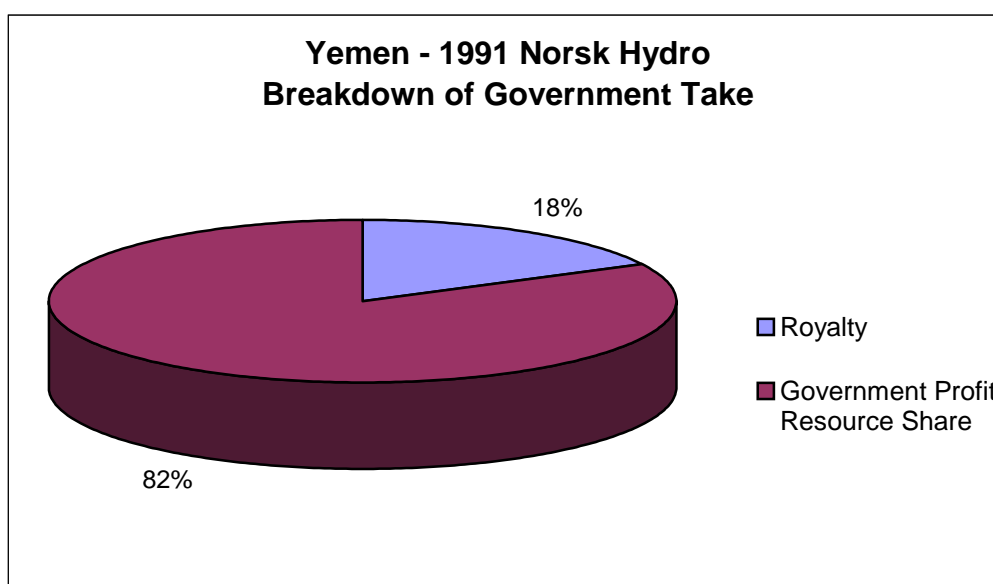
- 1) Royalties are calculated as 10% of gross revenues.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 77–90%.

Other Taxes:

- Signature bonus
- Production bonuses (including start-up bonus)
- Training bonuses

Cost Accounting: Exploration and Development costs are depreciated on a straight line basis over 4 years.

Cost recovery is limited to 25% of gross revenues less royalties.

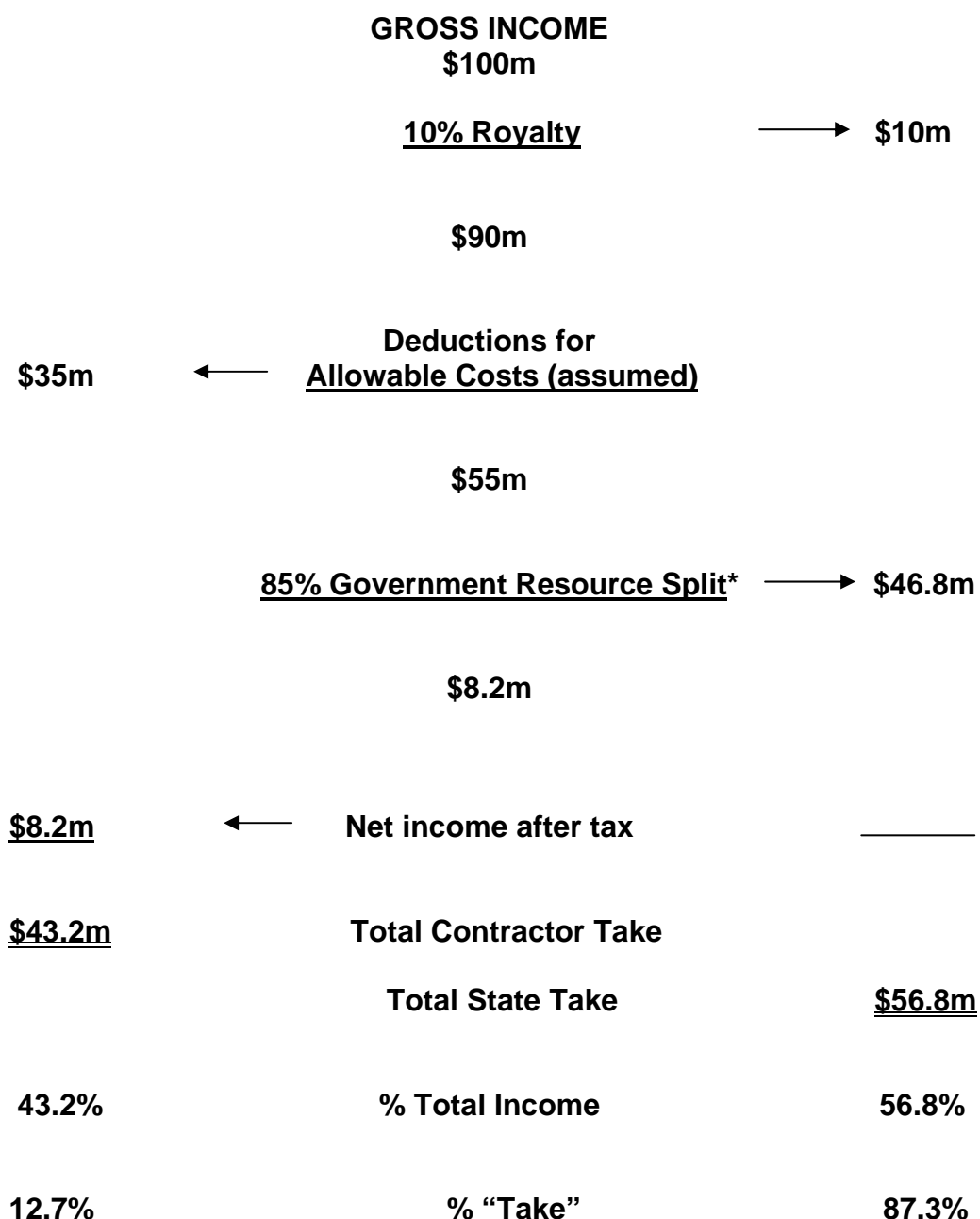


FLOW DIAGRAM FOR YEMEN
1991 NORSK HYDRO

Based on Gross Income of \$100m

Contractor Share

State Take



*=Government share of resources range between 77–90% depending on productio

Yemen– 1991 Nimir

Contract Type: Production Sharing Contract

% Government Take: 84.8%

Core Taxes Used:

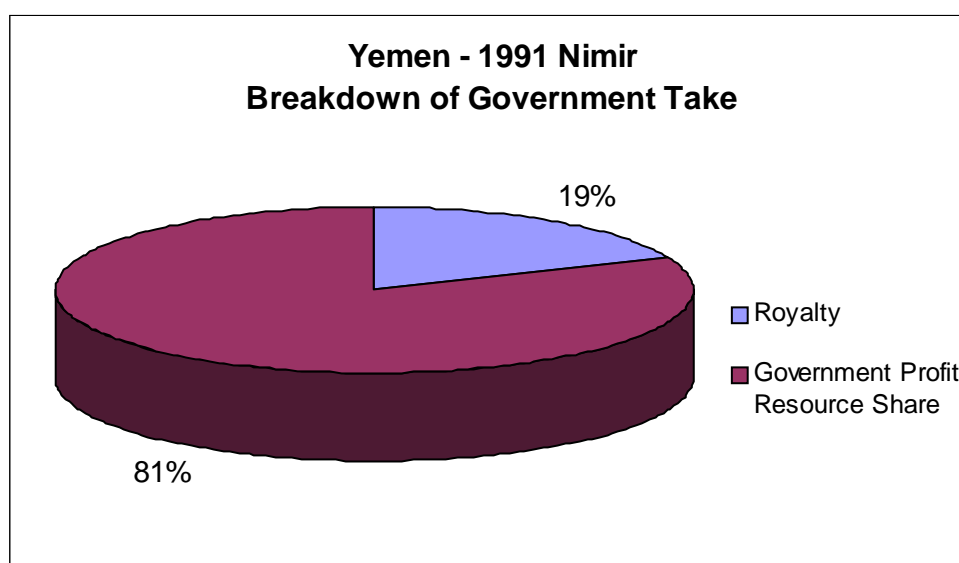
- 1) Royalty – 10%
- 2) Profit resource split –82%

- 1) Royalties are calculated as 10% of gross revenues.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 76–86%.

Other Taxes:

- Signature bonus
- Production bonuses
- Training bonuses

Cost recovery is limited to 30% of gross revenues less royalties.

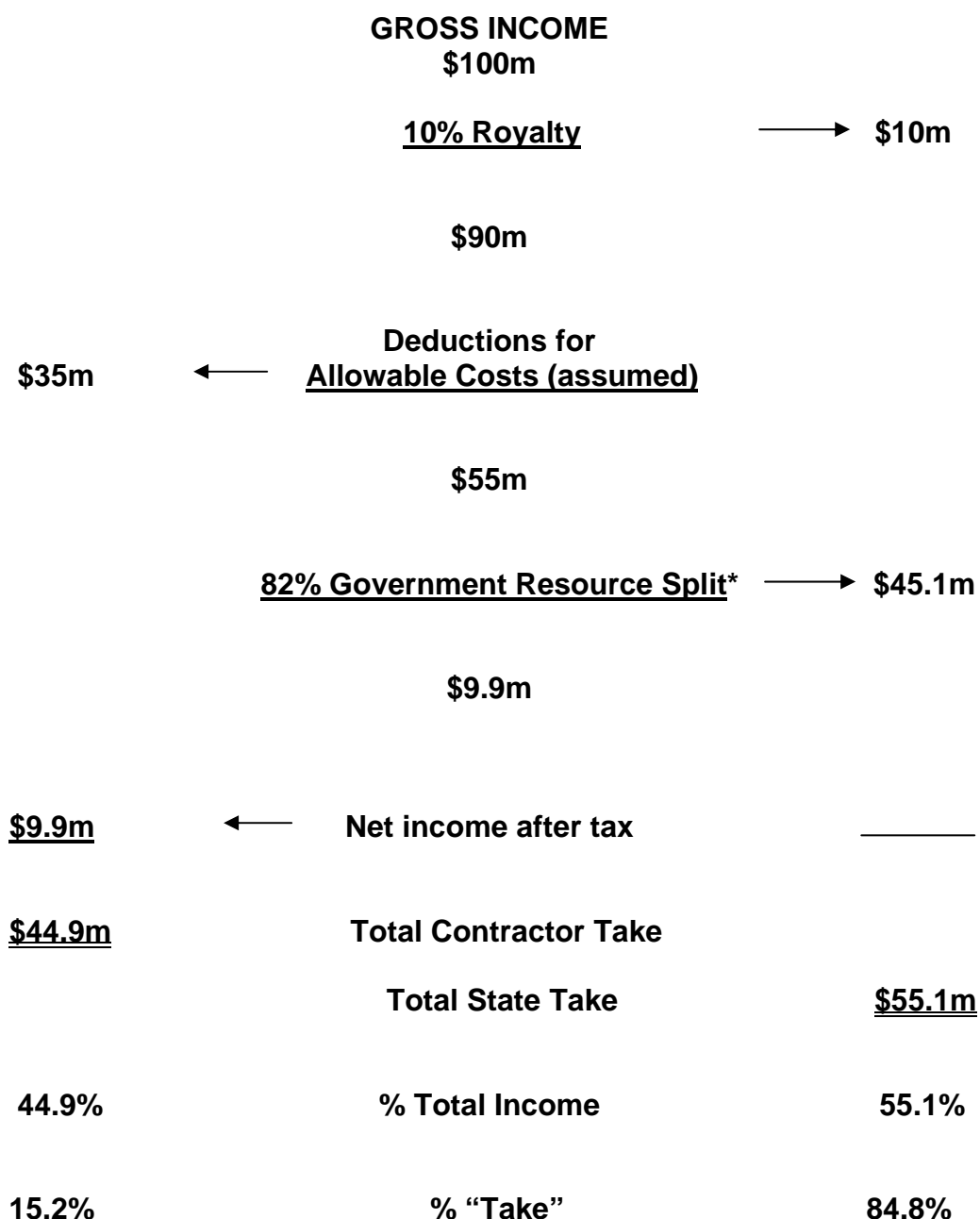


FLOW DIAGRAM FOR YEMEN
1991 NIMIR

Based on Gross Income of \$100m

Contractor Share

State Take



**=Government share of resources range between 76–86% depending on production*

Yemen – 1990/91 Shell

Contract Type: Production Sharing Contract

% Government Take: 89.7%

Core Taxes Used:

- 1) Royalty – 11%
- 2) Profit resource split –87.5%

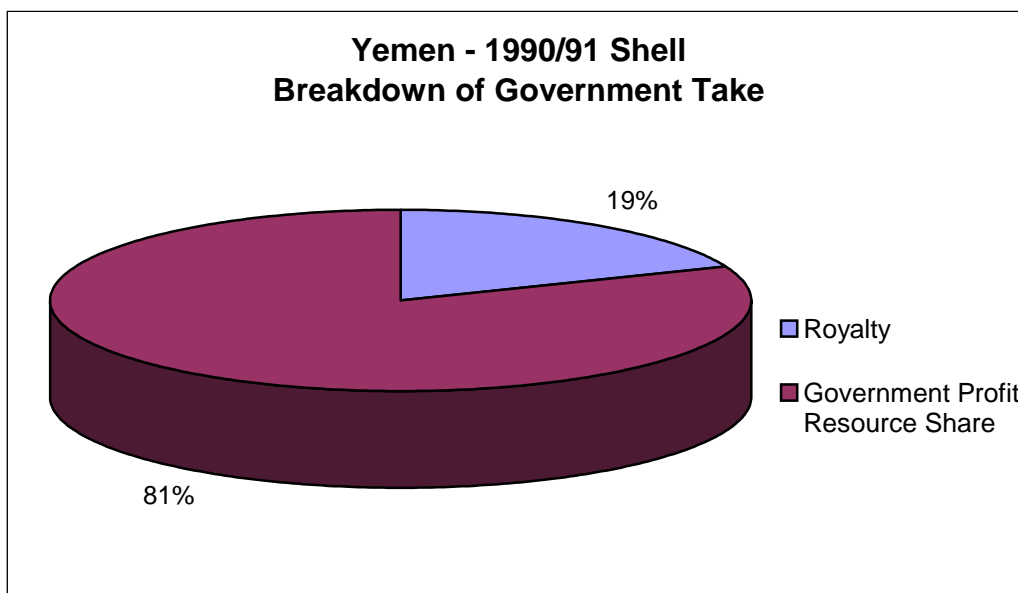
- 1) Royalties are calculated on gross revenues using a sliding scale based on production. The royalties range from 10-15%.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 80–91%.

Other Taxes:

- Signature bonus
- Production bonuses (including start-up bonus)
- Training & institutional bonuses

Cost Accounting: Explorations and development costs are depreciated using a straight line method. Exploration costs are depreciated over 4 years, and development costs over 5 years.

Cost recovery is limited to 25% of gross revenues less royalties.

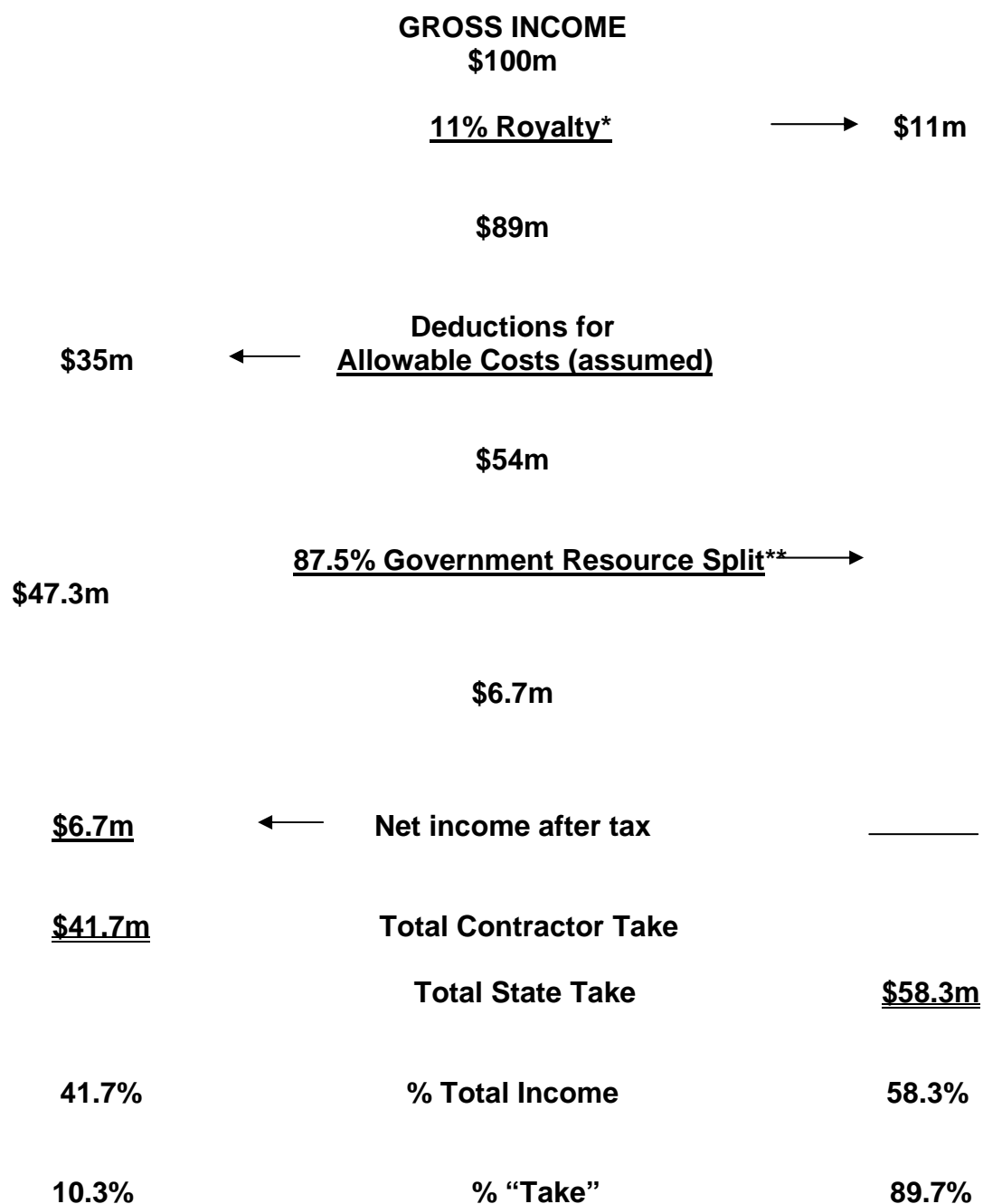


FLOW DIAGRAM FOR YEMEN
1990/91 SHELL

Based on Gross Income of \$100m

Contractor Share

State Take



**= Royalties are calculated on a sliding scale based on production (10-15%)*

**=Government share of resources range between 80–91% depending on production

Yemen – 1990 Crescent

Contract Type: Production Sharing Contract

% Government Take: 87.4%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit resource split –85%

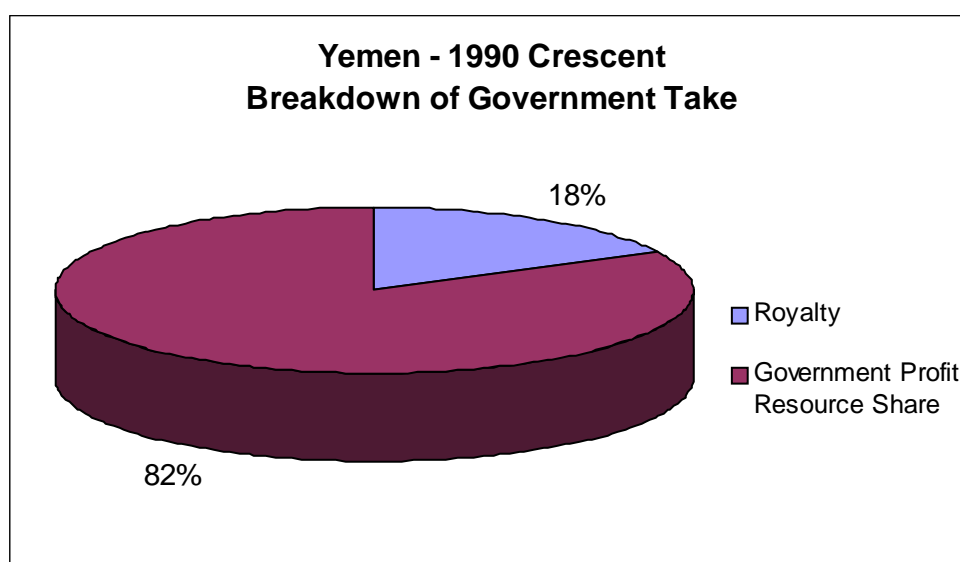
- 1) Royalties are calculated on gross revenues using a sliding scale based on production. The royalties range from 2.5-20%.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 78–92.5%

Other Taxes:

- Signature bonus
- Production bonuses (including start-up bonus)
- Training bonuses

Cost Accounting: Explorations and development costs are depreciated over 4 years using a straight line method.

Cost recovery is limited to 27% of gross revenues less royalties.

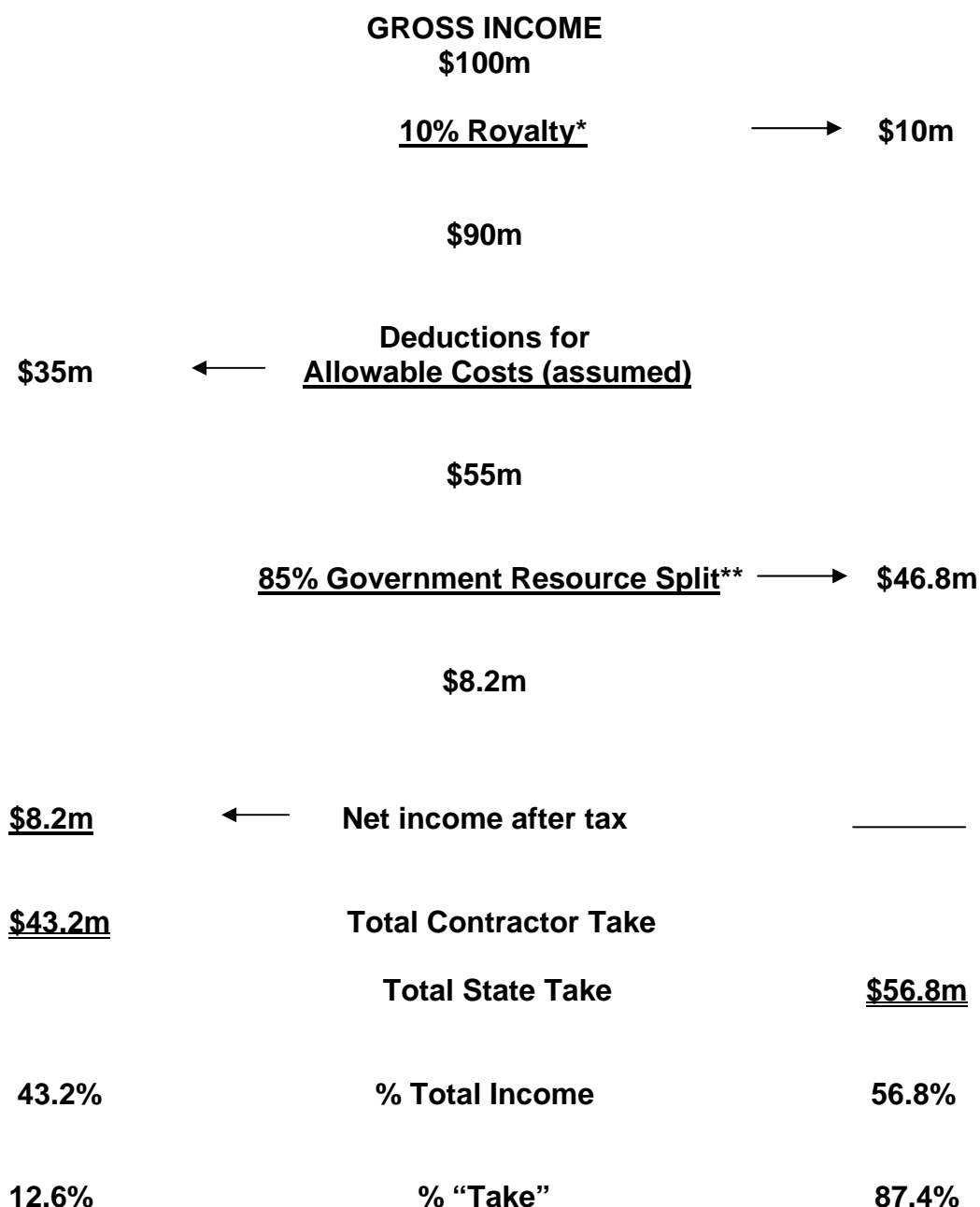


FLOW DIAGRAM FOR YEMEN
1990 CRESCENT

Based on Gross Income of \$100m

Contractor Share

State Take



*= Royalties are calculated on a sliding scale based on production (2.5-20%)

**=Government share of resources range between 78–92.5% depending on production

Yemen – 1990 Exxon, Kufpec, Total

Contract Type: Production Sharing Contract

% Government Take: 87.4%

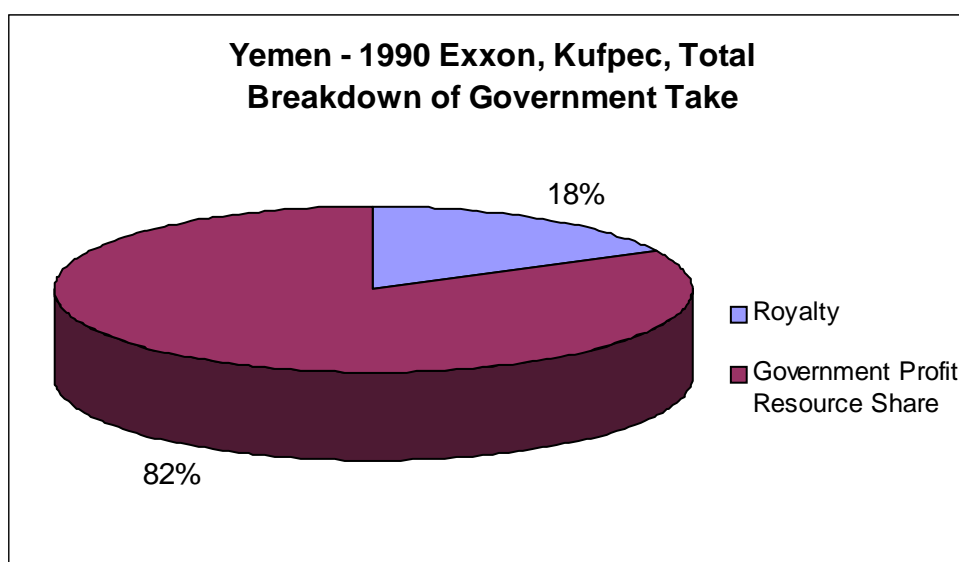
Core Taxes Used: 1) Royalty – 10%
2) Profit resource split –85%

- 1) Royalties are calculated on gross revenues using a sliding scale based on production. The royalties range from 5-20%.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 72.5–90%

Other Taxes: Signature bonus
Production bonuses (including start-up bonus)
Training bonuses

Cost Accounting: Explorations and development costs are depreciated over 4 years using a straight line method.

Cost recovery is limited to 27.5% of gross revenues less royalties.

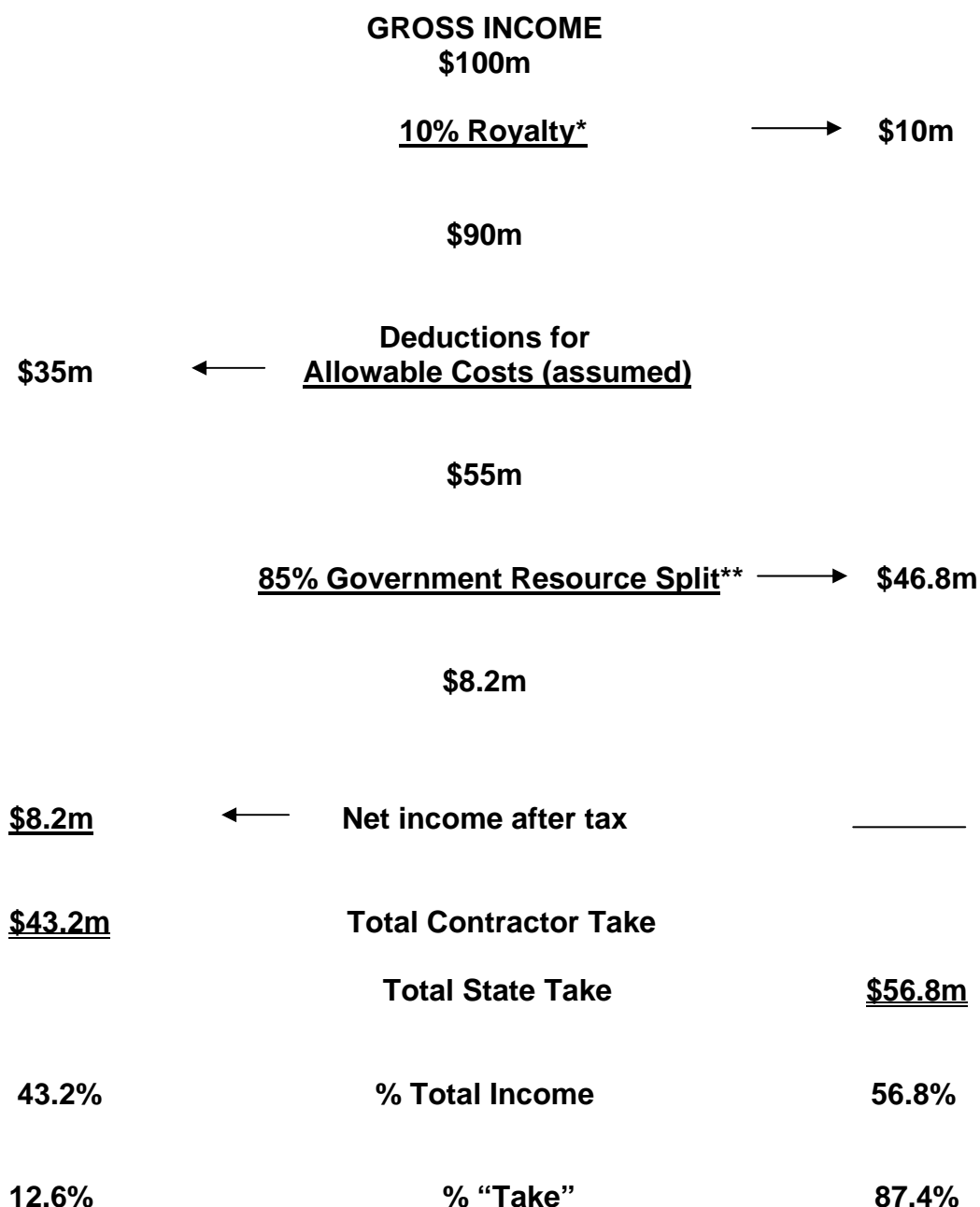


FLOW DIAGRAM FOR YEMEN
1990 EXXON, KUFPEC, TOTAL

Based on Gross Income of \$100m

Contractor Share

State Take



*= Royalties are calculated on a sliding scale based on production (5-20%)

**=Government share of resources range between 72.5–90% depending on production

Yemen – 1995 Production Sharing Contract

Contract Type: Production Sharing Contract

% Government Take: 88.2%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit resource split - 86%

- 1) Royalties are calculated on gross revenues using a sliding scale based on production. The royalties range from 5-20%.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 80-90%.

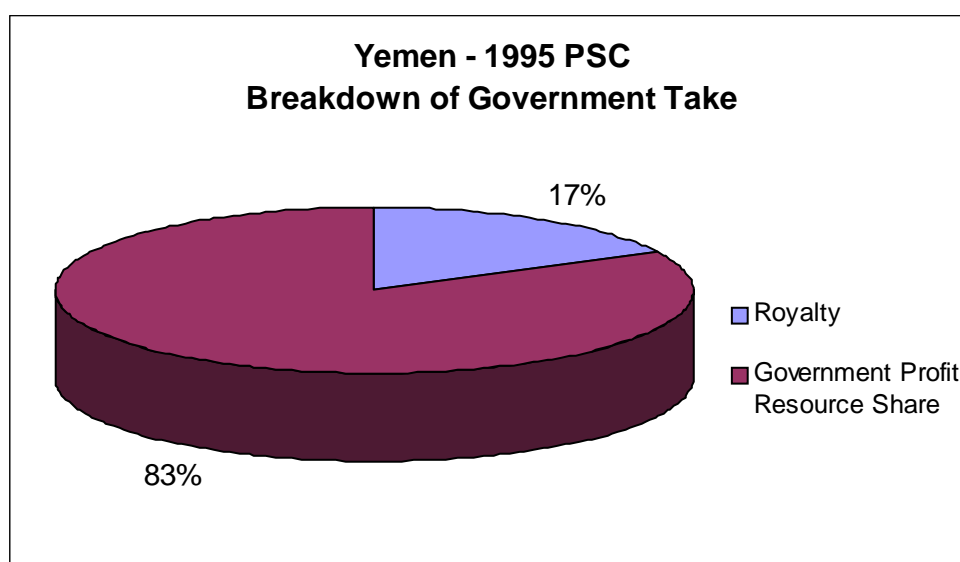
Other Taxes: Signature bonus.

Exploration Tax 3% on exploration expenditure.

Cost Accounting: Explorations and development costs are depreciated using a straight line method over 5 years.

Cost ring fencing applies by contract.

Cost recovery limits are negotiable, between 20-30% of gross revenues less royalties.



FLOW DIAGRAM FOR YEMEN
1995 PSC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

10% Royalty*

→ **\$10m**

\$90m

Deductions for
Allowable Costs (assumed)

\$35m

←

\$55m

86% Government Resource Split** → **\$47.3m**

\$7.7m

\$7.7m

←

Net income after tax

→

\$42.7m

Total Contractor Take

Total State Take

\$57.3m

42.7%

% Total Income

57.3%

11.8%

% "Take"

88.2%

**= Royalty ranges between 5-20%*

***= Government share of resources range between 80-90% depending on production*

Yemen – Post 1996 Oil and Gas Mine

Contract Type: Production Sharing Contract

% Government Take: 77.8%

Core Taxes Used:

- 1) Royalty – 6%
- 2) Profit resource split - 72%
- 3) Government Participation – 12.5%

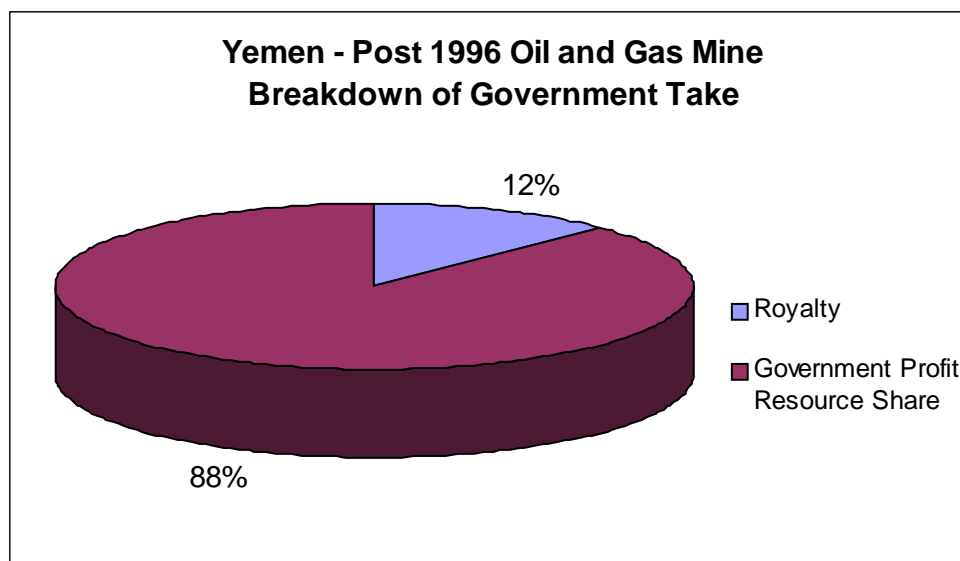
- 1) Royalties are calculated on gross revenues using a sliding scale based on production. The royalties range from 3-10%.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 65-82%.
- 3) The government entitled to a further 12.5% of the contractors share of profit resource through participation.

Other Taxes:

- Signature bonus
- Production bonuses (including start-up bonus)
- Training & Institutional bonuses

Cost Accounting: Explorations and development costs are depreciated using a straight line method over 4 years.

Cost recovery is limited to 50% of gross revenues less royalties.



**FLOW DIAGRAM FOR YEMEN
POST 1996 OIL AND GAS MINE**

Based on Gross Income of \$100m

Contractor Share

State Take

**GROSS INCOME
\$100m**

6% Royalty*

→ **\$6m**

\$94m

**Deductions for
Allowable Costs (assumed)**

\$35m

←

\$59m

72% Government Resource Split**

→

\$42.5m

\$16.5m

12.5% Government Participation

→

\$2.1m

\$14.4m

\$14.4m

←

Net income after tax

→

\$49.4m

Total Contractor Take

Total State Take

\$50.6m

49.4%

% Total Income

50.6%

22.2%

% "Take"

77.8%

**= Royalty ranges between 3-10% based on production*

***= Government share of resources range between 65-82% depending on production*

Yemen –1996 Nimir (Amended Terms)

Contract Type: Production Sharing Contract

% Government Take: 82.8%

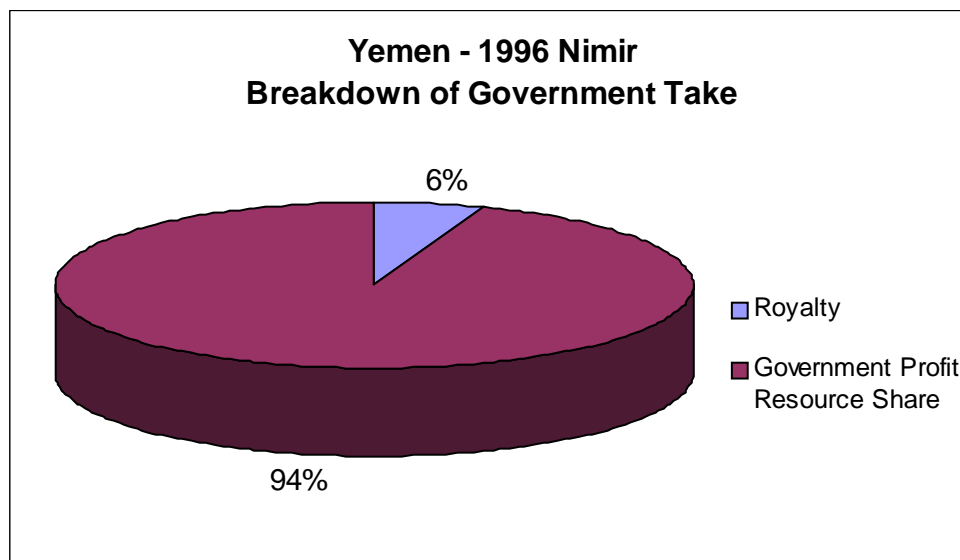
Core Taxes Used: 1) Royalty – 3%
2) Profit resource split - 82%

- 1) Royalties are calculated as 3% of the gross revenues.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 50-86%.

Other Taxes: Production bonuses
Training bonuses

Cost Accounting: Exploration costs are fully expensed. Development costs are depreciated using a straight line method over 2 years.

Cost recovery is limited to 70% of gross revenues less royalties.



FLOW DIAGRAM FOR YEMEN
1996 NIMIR

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

3% Royalty

→ **\$3m**

\$97m

Deductions for
Allowable Costs (assumed)

\$35m

←

\$62m

82% Government Resource Split*

→ **\$50.8m**

\$11.2m

\$11.2m

←

Net income after tax

\$46.2m

Total Contractor Take

Total State Take

\$53.8m

46.2%

% Total Income

53.8%

17.2%

% "Take"

82.8%

**= Government share of resources range between 50-86% depending on production*

Yemen –1997 Dusty Mac

Contract Type: Production Sharing Contract

% Government Take: 82%

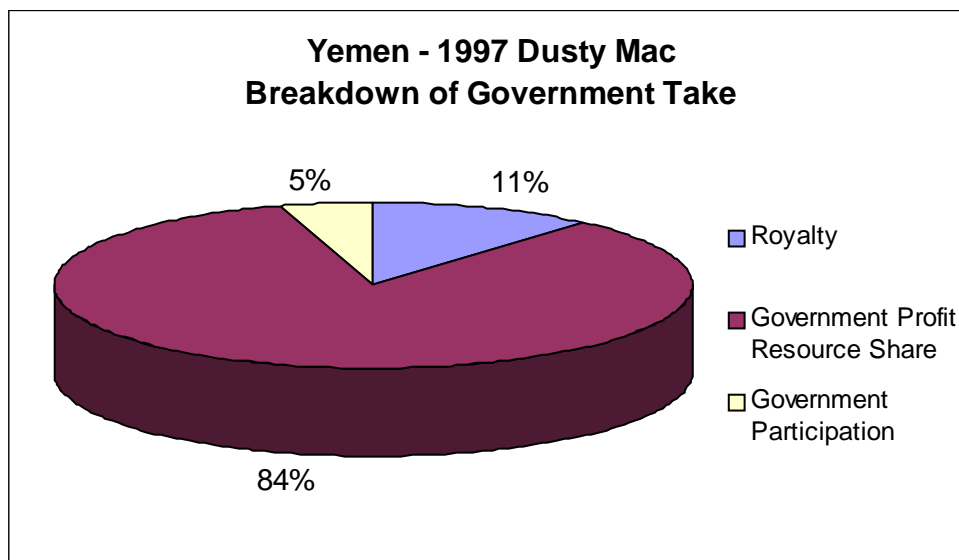
Core Taxes Used:

- 1) Royalty – 6%
- 2) Profit resource split - 76%
- 3) Government Participation 17.5%

- 1) Royalties are calculated on gross revenues using a sliding scale based on production. The royalties range from 3-10%.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 70-80%.
- 3) The government entitled to a further 17.5% of the contractors share of profit resource through participation

Other Taxes: Signature bonus

Cost Accounting: Cost recovery is limited to 50% of gross revenues less royalties.



FLOW DIAGRAM FOR YEMEN
1997 DUSTY MAC

Based on Gross Income of \$100m

Contractor Share

State Take

GROSS INCOME
\$100m

6% Royalty*

→ **\$6m**

\$94m

Deductions for
Allowable Costs (assumed)

\$35m

←

\$59m

76% Government Resource Split*

→ **\$44.8m**

\$14.2m

17.5% Government Participation

→ **\$2.5m**

\$11.7m

\$11.7m

←

Net income after tax

\$46.7m

Total Contractor Take

Total State Take

\$53.3m

46.7%

% Total Income

53.3%

18%

% "Take"

82%

* = Royalty ranges between 3-10% based on production

** = Government share of resources range between 70-80% depending on production

Yemen –Post 1996 Preussag

Contract Type: Production Sharing Contract

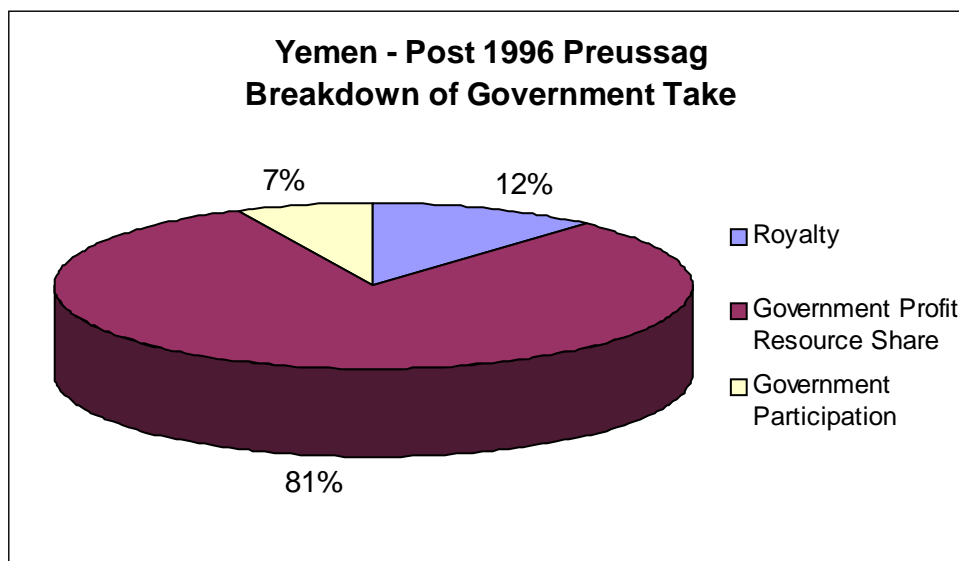
% Government Take: 78.2%

Core Taxes Used:

- 1) Royalty – 6%
- 2) Profit resource split - 70%
- 3) Government Participation –20%

- 1) Royalties are calculated on gross revenues using a sliding scale based on production. The royalties range from 3-10%.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 60-80%.
- 3) The government entitled to a further 20% of the contractors share of profit resource through participation

Cost Accounting: Cost recovery is limited to 50% of gross revenues less royalties.

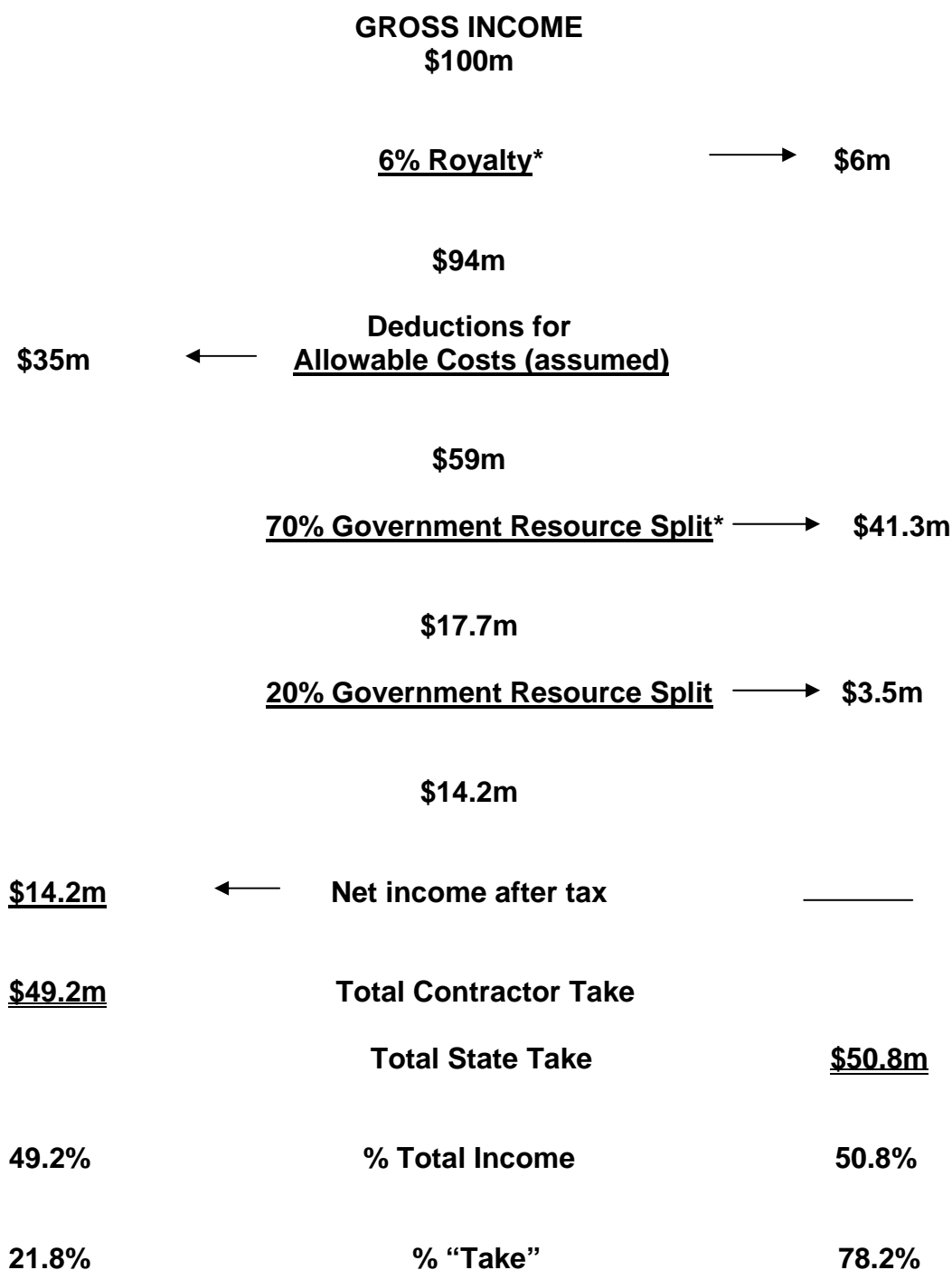


FLOW DIAGRAM FOR YEMEN
POST 1996 PREUSSAG

Based on Gross Income of \$100m

Contractor Share

State Take



* = Royalty ranges between 3-10% based on production

** = Government share of resources range between 60-80% depending on production

Yemen –1995 OXY Revised Terms

Contract Type: Production Sharing Contract

% Government Take: 82.2%

Core Taxes Used:

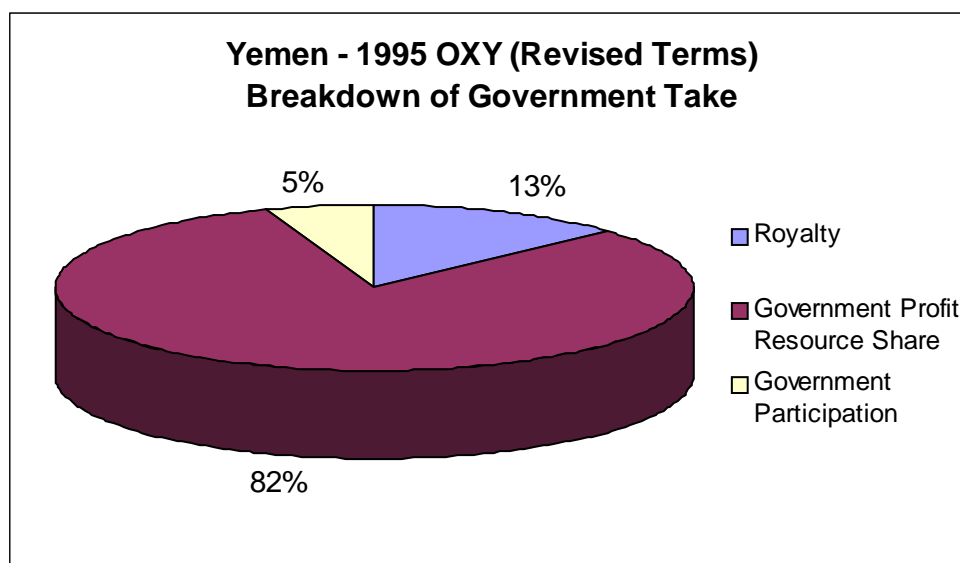
- 1) Royalty – 7%
- 2) Profit resource split - 75%
- 3) Government Participation – 20%

- 1) Royalties are calculated on gross revenues using a sliding scale based on production. The royalties range from 3-10%.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 70-80%.
- 3) The government entitled to a further 20% of the contractors share of profit resource through participation

Other Taxes: Production bonuses (including start up bonus)
Training bonuses

Cost Accounting: Exploration costs are fully expensed. Development costs are depreciated using a straight line method over 4 years.

Cost recovery is limited to 50% of gross revenues less royalties.

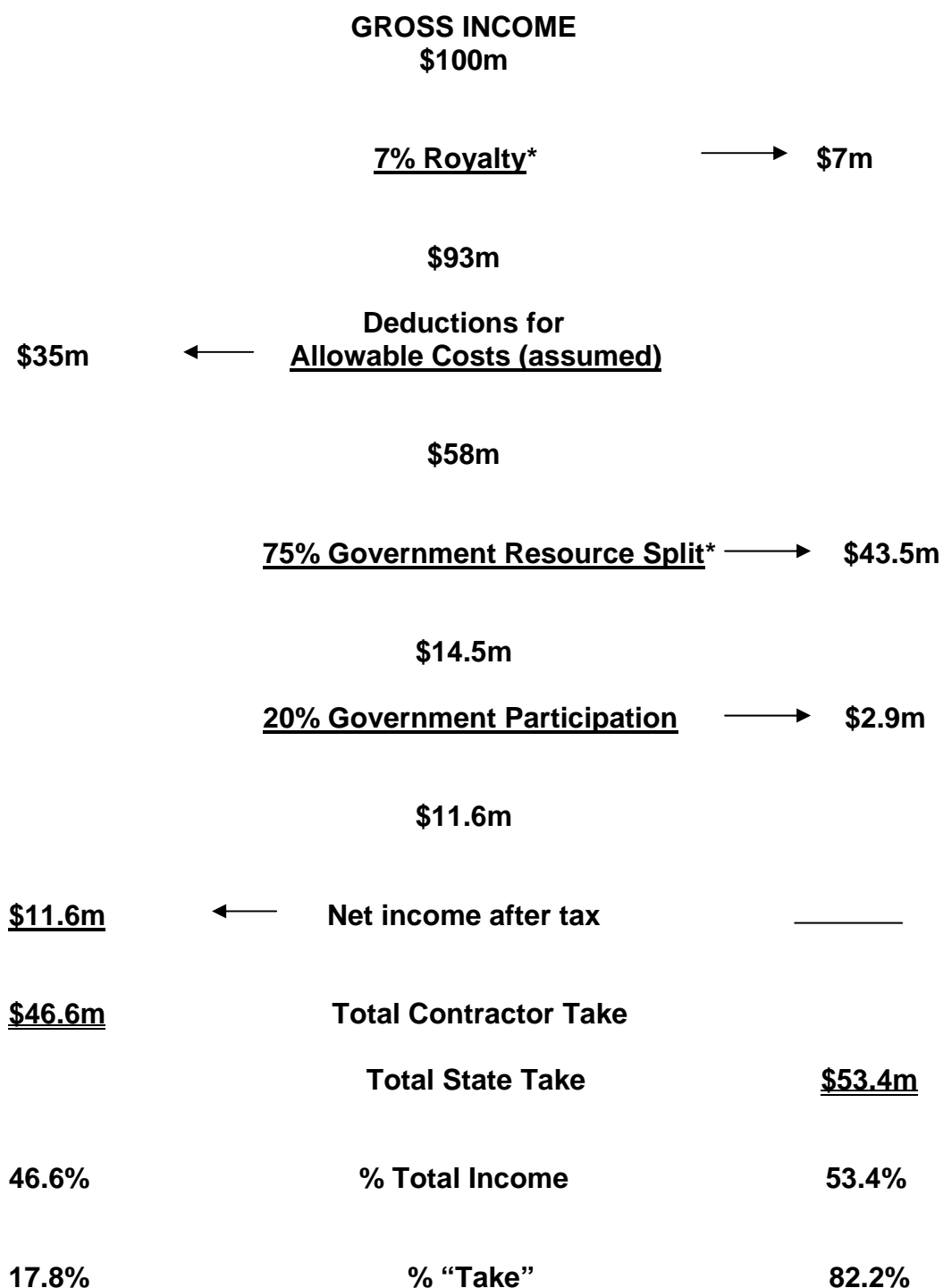


FLOW DIAGRAM FOR YEMEN
1995 OXY REVISED TERMS

Based on Gross Income of \$100m

Contractor Share

State Take



* = Royalty ranges between 3-10% based on production

**= Government share of resources range between 70-80% depending on production

Yemen – 1997 Malik Block Production Sharing Agreement

Contract Type: Production Sharing Contract

% Government Take: 85.7%

Core Taxes Used:

- 1) Royalty – 10%
- 2) Profit resource split – 77.5%
- 3) Government Participation – 25%

- 1) Royalty is calculated as 10% of gross revenues.
- 2) After contractors cost recovery, resources are split according to a sliding scale based on production, with the government share ranging from 70-80%.
- 3) The government entitled to a further 25% of the contractors share of profit resource through participation

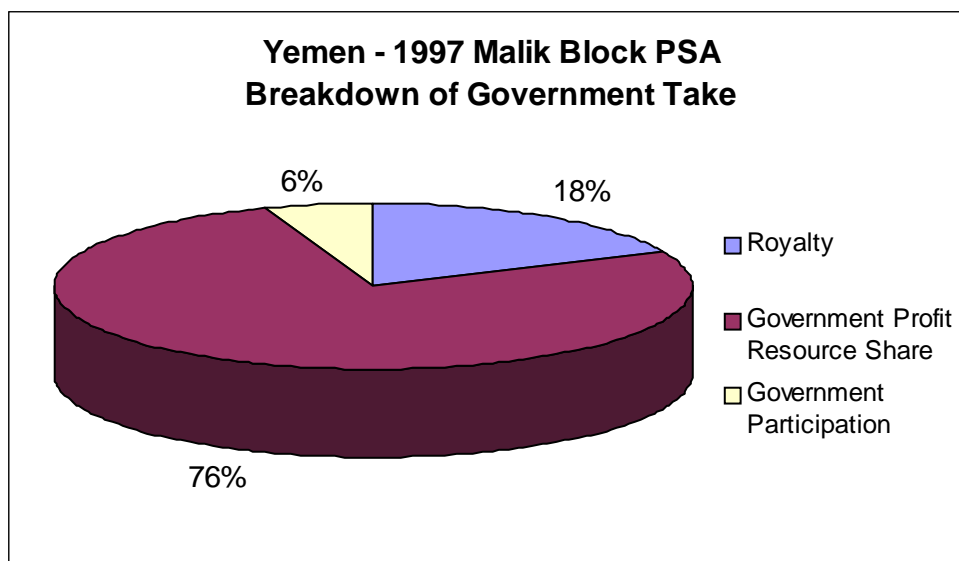
Other Taxes:

- Signature bonus
- Production bonuses
- Training bonus
- Institutional bonus
- Social development bonus

Cost Accounting: Capital expenditure is depreciated over 2 years.
All operating expenditures are expensed.

Cost ring fencing applies by contract

Cost recovery limits are 45% (50% of gross revenues less royalties).

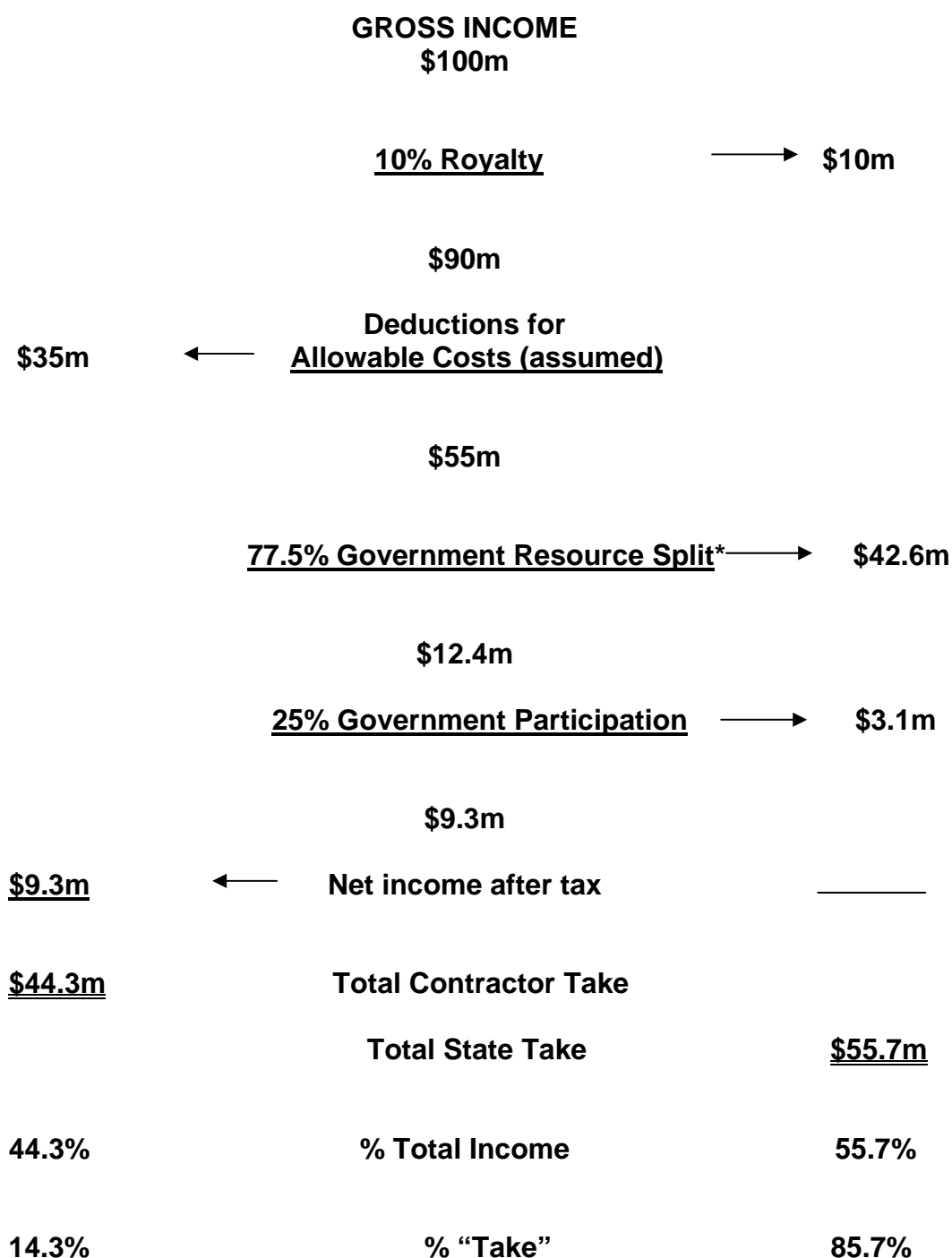


FLOW DIAGRAM FOR YEMEN
1997 MALIK BLOCK PSA

Based on Gross Income of \$100m

Contractor Share

State Take



**= Government share of resources range between 70-80% depending on production*